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Industrial Nursing

PUBLIC HEALTH NURSING

■ INDUSTRIAL NURSING'S FIRST FIFTY YEARS

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PUBLIC HEALTH NURSING

Official Organ of the National Organization for Public Health Nursing, Inc.

Building for the Future in Industrial Nursing

MARCH 1945 marks the passing of fifty years since the first nurse was placed on industry's payroll. As we scan the horizon in an effort to foresee what may be anticipated for industrial nursing in the postwar period we must of necessity look back to identify the signposts which have marked the trend of our progress thus far.

There had been an increased awareness of adult health needs prior to the war. Life expectancy is increasing to the extent that the structure of population has been profoundly affected. A mounting interest and activity in industrial health among plant executives, plant physicians and nurses, governmental agencies and others had made much progress before the need for war production gave added impetus. Since then the essentiality of keeping workers well and on the job has done much to emphasize the important role of plant health services. Tangible evidence of this is shown in the increase in the number of industrial nurses from 3,300 in 1938 to an estimated 12,000 at the present time.

The high percentage of military rejections, to date more than 5,000,000, has disclosed the great need to direct concerted effort toward improving the physical and mental fitness of the American people for their present and postwar responsibilities. In addition to rejectees, a million men have been discharged from service because of defects other than those sustained in battle. We find industry having to absorb most of those who can not qualify for military service.

Thus industry has been confronted with the task of producing more material at a faster rate by workers having a higher percentage of health problems. The utilization of the younger and physically

fit by the military has left industry to recruit workers largely from IV-F's, the very young, the older age groups, and women. Industry, being unable to select, has of necessity utilized preplacement examinations more and more as a means of matching physical capacities of workers with job demands, seeking to improve the health of workers meantime. This is significant and seems to be leading generally toward a much sounder consideration of each worker's ability and health needs.

The remarkable success of the Army in its rehabilitation of 1,500,000 men after they were inducted has demonstrated what can be done by vigorous and co-ordinated effort. State programs with the aid of federal funds under the Barden-LaFollette act for medical correction of defects hindering employment should be developed more effectively and utilized more widely.

Among those returning to industry from military service are many who are being rehabilitated from war injuries. The physical and mental needs of this returning group will be in some ways greater, but in general the same as for the other working population. Health problems in industry, caused by war conditions, have directed attention to health facilities and their lacks both in the community and industry. Industry is accepting increasing responsibility for developing health programs with a major emphasis on prevention. To this end a number of large plants have already added physicians with public health training and experience to their medical staffs who will explore all of the possibilities for prevention in their future programs.

The importance of nurses in the industrial health field has been indicated by their tremendous increase in plants, in

PUBLIC HEALTH NURSING

the divisions of industrial hygiene of health departments and in insurance agencies. The need for nurses in military service has probably inhibited the expansion which might have taken place. On the other hand, it has stimulated a healthy scrutiny of nurses' functions in industry, encouraging nurses to devote their efforts solely to nursing duties. Industrial nurses are appraising their services and their working relationships, keenly desirous of meeting adequately the responsibility which has been placed upon them. The industrial nurse must constantly increase her knowledge of her job for she knows that a sound framework depends on her interpretation of her service to workers, to management, and to other professions as well as her own.

Increased scope of service has directed a great deal of attention to the preparation of nurses for industrial service. Since the basic preparation of nurses can be only broad and general, industrial nurses are seeking added preparation through

postgraduate work from universities. Universities are preparing to meet this need by providing special courses and some will offer a year's program of study in industrial nursing as the demand arises.

It is difficult to prophesy what the future holds in industrial health in the postwar period. Gains were made following World War I; therefore it seems logical to anticipate still further progress when health personnel are available who can apply the knowledge learned from production during World War II.

On the 50th anniversary industrial nurses may well view the future optimistically, knowing that success actually depends on individual ability and desire. Accomplishment in any endeavor is preceded by unity of thought and purpose. Therefore industrial nurses know they can contribute only as they fit their efforts into the mosaic of industrial and health groups who are directly charged with responsibility for the health of people who work.

More About the Proposed Draft

THIS continues the running account of events relating to the nurse shortage and efforts on the part of the nursing profession and the Federal Government to find a successful solution to the problem. (See February PUBLIC HEALTH NURSING, page 57).

February 9—Surgeon General Thomas Parran pointed out to USPHS District directors and health officers of state health departments that well qualified public health nurses in essential nursing positions will contribute more to the war effort in that capacity than they can as hospital nurses in military service. It is assumed that most procurement and assignment committees will declare such nurses essential. If, in spite of this, exceptionally well qualified public health nursing supervisors are considering military service seriously, a limited number may receive commissions in the U.S. Public Health Service.

February 13—Under-Secretary of War Robert P. Patterson, testifying at the hearings on the May bill, urged a draft of nurses without delay because the Army now needs 60,000 nurses and there is a shortage of 16,000.

February 16—Hearings on the May bill HR 1284 were concluded.

February 19—National Nursing Council for War Service announced a new nationwide voluntary recruitment campaign for nurses and auxiliary workers. Activities will include recruitment booths in department stores, window displays, and intensive newspaper and radio publicity.

February 20—New draft bill HR 2277 introduced by Representative May, superseding HR 1284. This bill provides that every female in the age group 20 to 45 who is a registered nurse, or a graduate of a school of nursing (regardless of its number of beds) and eligible to apply for examination for registration as a registered nurse, is subject to registration and selection and induction into the Armed Forces. No person so registered shall be inducted until all qualified cadet nurse graduates who are not deferred are inducted. Nurses declared essential by P and A and nurses in the Veterans Administration are not subject to induction. The Act shall apply only to unmarried nurses. It shall not affect voluntary recruitment of qualified nurses.

(Continued on page 168)

Fifty Years of Industrial Nursing in the United States

By BETHEL McGRATH, R.N.

A HISTORY of this phase of industrial health work in the United States will fill a rather large volume when completed. A study of the beginnings and vicissitudes of 50 years brings to light the factors that have combined to affect our struggle to standardize industrial nursing service. Widely separated industrial areas, multiple and diverse types of industry, executive and medical personnel as varied as the industries, the financial cycles of war and peace, attitudes of educators and the personnel of both official and nonofficial public health agencies, all are threads in the fabric of industrial nursing today and must be taken into account in cutting our pattern for tomorrow. There is not space in this short article for a detailed account of the interrelation of events and trends. Only the high lights of the past 50 years can be touched upon.

It is natural that "firsts" in industrial health work in the United States go back to the north Atlantic seaboard because that was our first heavily industrialized area. The history of industrial nursing is frequently dismissed with the statement that "the first nurse in industry in this country was employed by the Vermont Marble Company in 1895." In 1942 the author became curious about that nurse and wrote the company to learn her name, why she had been employed, what her duties were, her preparation for her work, her salary, and other facts. The inquiry brought to light the nurse herself and her own story of her work.

Mrs. McGrath is director of welfare, Powers Dry Goods Company, Inc., Minneapolis, and former industrial consultant of the NOPHN.

Industrial nursing was not an invention of either the medical or nursing profession but was initiated by management. Fletcher D. Proctor, president of the Vermont Marble Company, is the man responsible. He was the son of Redfield Proctor, the founder and first president of the company. Ada Mayo Stewart, now Mrs. Henry J. Markolf, was the nurse he chose for service with his company. Mrs. Markolf has written for this issue her own story of the first days of industrial nursing.

Anna B. Duncan of New York City was the second industrial nurse on record in this country and she has stated that she began her work in 1897. She was employed by the Benefit Association of John Wanamaker Company, New York City, to visit sick employees and see that funds were fairly distributed. This mission developed into the kind of health service that might be expected of an intelligent nurse. She gave first aid when needed, arranged for prompt medical care for the sick or injured, paid return visits to see that the doctor's orders were understood and complied with, and checked to be sure return visits were made to physicians when necessary. She prevented workers in an infectious stage and other sufferers from returning to work before their condition warranted it. Lastly she distributed such financial assistance as the Benefit Fund provided so that "financial anxieties" of patients were somewhat relieved.

Many of Miss Duncan's duties have descended upon her successors in industry because they are a natural part of the in-plant health program. Fewer in-

dustrial nurses have followed in the steps of Ada Stewart because, in the intervening 50 years, official and nonofficial health agencies have developed a system of skilled home care and instruction in all metropolitan areas, and in many smaller and rural communities as well. Home care is also extended to sick workers in their homes by a number of insurance companies. Fletcher Proctor brought bedside nursing to his people in Vermont as a private enterprise because it was not furnished by a community agency in that area at that time.

English industrial health work dates from about the same period. The Cadbury Company, chocolate manufacturers, established nursing service in 1897. Although industrial and commercial concerns in both countries followed the example of these pioneers, there is little data to throw light upon the expansion of nursing service in industry between 1895 and 1915. Three forces accelerated the employment of nurses in industry between 1910 and 1920. These were the advent of workmen's compensation laws; the efforts of tuberculosis associations to protect the public against communicable diseases in food handlers; and World War I.

The first registry for industrial nurses known to the author was opened in Boston in 1913 "for the purpose of supplying suitable nurses for the emergency rooms of factories." The service these nurses were expected to render is obvious. A sufficient number of nurses were employed in and around Boston by 1915 so that the "Boston Industrial Nurses' Club" was organized. This occurred under the leadership of Mrs. Anna M. Stabler who was at that time executive secretary of the Committee on Health in Industry which had been organized by the community's public health leaders and the Boston Tuberculosis Association. An acute awareness of problems encountered by a professional nurse in the unfamiliar environment of "emergency rooms of factories" and the impossibility of finding answers to the problems in nursing precepts and precedents made the nurses enthusiastic over the type of or-

ganization where they might discuss their common problems with others in similar work.

Nurses outside of Boston sought membership in the club and in the following year the Boston Club became the Massachusetts Industrial Nurses' Organization. Nurses in adjoining states applied for membership and the Massachusetts organization helped them organize industrial nursing groups in their own areas. In 1918 all of these united in the New England Industrial Nurses' Association. The New England Association has continued its activities throughout the years and is a strong and growing organization today.

In 1935 the New England Association invited the New York Industrial Nurses' Club to a quarterly meeting in New Haven, Connecticut. The following year the New York Club invited the officers of the New England Association to their annual meeting in New York where the suggestion was made that the New York and New England clubs hold one large meeting together. The membership favored the plan and invited the New Jersey and Philadelphia clubs to participate. The result was the first joint conference of New York, New England, New Jersey and Philadelphia industrial nurses' associations, held in New York City in October 1938. Annual conferences of these groups continued with the Detroit Club requesting affiliation in 1939.

DURING the annual conference in Philadelphia in April 1942 the present American Association of Industrial Nurses was organized for the purpose of stimulating interest on a nationwide scale in nursing problems peculiar to the industrial field, and to provide a forum for the discussion of such problems. They are working for higher professional standards, better qualifications among industrial nurses, better educational opportunities for nurses planning to enter the industrial field, and for close cooperation with other groups promoting industrial health. Catherine R. Dempsey, president of the New England Association, was elected president of the AAIN and re-

elected again in 1943 and 1944. The membership numbers several thousand registered nurses employed in industry, representing every geographical area and type of industry.

The dozen industrial nurses who held a dinner meeting in Boston in the summer of 1915 and organized the Boston Industrial Nurses' Club had no idea that their direct descendants would be counted in the thousands in 1945. The Boston Club was only one ancestor of the present family.

Other beginnings were equally interesting but it is impossible here to go into their history. One of the early clubs closely associated with the New England group should be mentioned, however, because questions are often asked about an earlier American Association of Industrial Nurses. In 1916 a second group of industrial nurses in Boston sought information about labor legislation, particularly workmen's compensation, from the Women's Division of the National Civic Federation, Massachusetts Section, 20 Ashburton Place. Mrs. William McNamara, field secretary for that organization and herself a registered nurse, offered the Federation's Boston office for monthly meetings of the group. Out of these meetings the Factory Nurses' Conference was organized that year. Only graduate registered nurses were eligible. Through the efforts of Mrs. Roger Woolcott of the Federation arrangements were made in 1917 with Dean Lord of Boston University for a course called Industrial Service for Nurses. This was given evenings in the College of Business Administration, under the direction of Mrs. McNamara. This course was repeated annually for five years and so far as the author knows was the first course of instruction in this country designed particularly for industrial nurses.

Lecturers were drawn from the Economics Department of Boston University, the State Department of Labor and Industry, the Industrial Accident Board, liability insurance companies, the Board of Health of the City of Boston, and from personnel and medical departments of large industries. The course consisted

of two lectures a week (each two hours long) for 16 weeks, and each student was assigned two weeks of field work in one of the cooperating industries under the supervision of the service or medical department of the industry. The fee for the course was \$25, and at its completion Mrs. McNamara assisted students seeking employment in industry.

In 1922 the Factory Nurses' Conference changed its name to the American Association of Industrial Nurses although its activities were never national in scope. Branches were formed in towns and cities of Boston area, including a branch at Hartford, Connecticut. After formation of the Hartford branch this association seems to have flourished more in Connecticut than elsewhere, while the New England association became strong along the coast and in other New England areas. Membership in the American association was considerably affected by a reduction in nursing personnel in the late twenties. Those remaining were invited to merge with the New England association and did so in 1933. With funds remaining in the Hartford branch the late Winifred Hardiman, chairman and activating spirit of the Connecticut group, was sent to the convention of the American Nurses' Association held in Washington in 1933. At the convention a paper was read by a midwestern industrial nurse, Heide Henriksen of the Twin City Rapid Transit Company, Minneapolis, Minnesota, but it was ten years before these two nurses, both leaders in their areas, met and worked together for and with industrial nurses, Miss Hardiman as chairman of the Educational Committee of the present American Association of Industrial Nurses and Miss Henriksen as industrial nursing consultant with the National Organization for Public Health Nursing.

PUBLIC HEALTH groups have always been interested in the opportunities for adult health work presented by industry and have accumulated and disseminated much knowledge of value to all industrial health workers. In 1920 the National Organization for Public Health

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Nursing inaugurated an Industrial Section. The bound volumes of PUBLIC HEALTH NURSING for the past 25 years contain a wealth of material pertinent to industrial nursing which has not been accumulated elsewhere and which is still very useful. Consistently, through good times and bad, the editors have encouraged and patiently prodded nurses in industry to write articles for publication which have been widely used. It is interesting to read this material and find in it exactly the same answers to problems which have been recently arrived at by other means and widely accepted. Prominent persons now active in the industrial health field were stimulated to their first interest in the work of the nurses in industry through the requests of this magazine for material to publish which would give nurses a broader conception of their relation to other specialists in the health field. The NOPHN's bibliography for industrial nurses was for a long time the only one of its kind published in the country.

In 1929 a study was made by the National Organization for Public Health Nursing of nurses in commerce and industry to determine: (1) the number and type of industries employing nurses (2) number of nurses employed (3) professional status with regard to registration (4) whether or not a physician was employed and the relation of nurse to physician (5) working hours of nurses, and (6) services expected of nurses by employers. The findings appear in Louise M. Tattershall's report on "Nurses in Commerce and Industry" in the November 1930 issue of PUBLIC HEALTH NURSING. When the report was released representatives of industrial nursing, hygiene and medicine, and of the National Safety Council, the National Tuberculosis Association, and NOPHN formed a committee for further study of the work of the nurse in industry in order to make recommendations that would connect nursing activities more closely with the whole industrial health movement. Dr. C. O. Sappington, then director of industrial health service for the National Safety Council, was chairman. Among other ob-

jectives of their program was the preparation of a manual on industrial nursing "sufficiently flexible to be adapted to various types of industry." This project was undertaken by the NOPHN.

Mrs. Violet Hodgson, a member of the NOPHN staff, observed the work of nurses and services to which the nursing program is related in 40 industries employing from 200 to 40,000 workers. The industries included textiles, steel, meatpacking, kodak, electrical appliances, shoes, abrasives, printing and candy. Her book *Public Health Nursing in Industry* was published in 1933 (Macmillan Company, New York) and contained a wealth of sound information. In 1942 NOPHN felt that another manual should be published, preferably by an experienced industrial nurse. Such a manual has recently been completed and will be published shortly. (See page 124.)

From 1920 to 1943 the NOPHN Industrial Nursing Section represented the industrial nursing section of the National Safety Council, and as such carried responsibility for the nursing programs at the Safety Council's annual meetings. Joanna Johnson, able representative in the Midwest, was largely responsible for the success of these meetings. In 1943 the Safety Council formed its own industrial nursing section. At the Biennial Nursing Convention in Buffalo in June 1944 the American Nurses' Association also authorized the organization of an industrial nurses section.

In 1940, at the suggestion of Ruth Houlton, a Committee to Study the Duties of Nurses in Industry was formed by the Public Health Nursing Section of the American Public Health Association. Results of the study were to "serve as a basis (1) for determining the range of nursing activities included in all types of industrial nursing services (2) for formulating a statement of recommended practices in industrial nursing and (3) for defining the current problems confronting nurses in industry." Olive M. Whitlock, then public health nursing consultant of the United States Public Health Service, served as chairman of this group.

From April 1941 until the final com-

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mittee meetings early in 1943, Miss Whitlock worked tirelessly, guiding and co-ordinating the work of the various committees, bringing the survey to a successful conclusion while serving in her official capacity. In so broad a land it is difficult to coordinate activities of widely separated groups even in the same profession. For the first time in the history of industrial nursing all factions and geographical groups were brought into action on one project. Each made a valuable contribution to the successful completion of the survey. These findings and the recommendations which followed their release will have a far-reaching effect on the industrial nursing of the future. A full report of the study, including names of all committees, is to be found in the July 1943 issues of the *American Journal of Public Health* and *PUBLIC HEALTH NURSING*. Recommendations for acceptable practices based upon the findings were made by representative industrial nurses selected from all sections of the United States.

ONE NURSE in industry by 1895, 3,000 in 1930, 6,000 in 1941, and an estimated 12,000 in 1945 is the story in figures. The Social Security Act (1935) made funds available with which official agencies could augment and expand their services. This made possible the creation of divisions of industrial hygiene in several states and local health departments in industrial areas. This number has grown until there are approximately 30 state, 8 city and 2 county health departments having divisions of industrial hygiene.

Industrial nursing consultants have been added to the staff of these divisions wherever available. Indiana was the first to appoint an industrial nursing consultant, Ruth M. Scott. This was late in 1939. Michigan was second, appointing Mary Alton in 1940. Much progress had already been made when war production added its impetus. The increase of nurses among other industrial health personnel in the critical period after 1940 has helped to safeguard the health of

thousands of employees throughout the country during the strain of war and production for war. Both the Industrial Hygiene Division of the USPHS in Washington, and the National Organization for Public Health Nursing in New York added industrial nursing consultants to their staffs in 1941 to help meet the needs of the many nurses undertaking work in a field that was new to them. Advisory service is available from any of these consultants for the asking. They have stimulated organization of industrial nursing associations according to whatever plan was suited to the area and circumstances. In 1944 the newly organized AAIN appointed a chief consultant on industrial nursing problems who is coordinating a system of area consultants and local counselors through which to channel information, or present problems for consideration that require the combined thinking of the group.

In 1943 the American Nurses' Association organized a Special Committee to Study the Implications of the Fair Labor Standards Act as These Relate to Industrial Nursing. The USPHS, AAIN, and NOPHN all have representatives on this committee.

In 1944 a joint committee was formed consisting of three nurse representatives each from the AAIN and NOPHN, with the president and executive secretary of AAIN, chairman of the Industrial Nursing Section and the industrial nursing consultant of NOPHN. This is a standing committee to confer on qualifications, educational programs, and any other matters pertaining to industrial nursing and nurses which either group wishes to submit to the committee. Both groups are promoting the integration of industrial content in the basic nursing curriculum. And each is devoting much time and effort toward formulating a postgraduate course which will become a permanent part of the college curriculum and which will prepare the nurse as well for her position upon entering industry as advanced nursing education now prepares the nursing arts instructor for her particular work, or the public health nursing course prepares the nurse for one of sev-

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eral generally recognized public health specialties. The needs of the industrial nurse have never been given the recognition in college curricula that her position in the health picture of a nation warrants. This lack of recognition has been due largely to the fact that there are no nurses on university faculties who have had experience in industry. They are experienced in other public health fields and stress training to meet needs they understand, minimizing or passing by entirely needs they do not understand. This picture is changing. In 1943, Anna Fillmore, a public health nurse with practical

industrial experience and a year of intensive work in industrial hygiene and observation within a wide variety of industries, joined the faculty of Columbia University. In 1944, Heide Henriksen, with many years of industrial experience to her credit, was added to the faculty of the University of Minnesota and to the staff of the Industrial Hygiene Division of the Minnesota Department of Health. Other experienced industrial nurses are preparing for similar positions. It will not be long now! We have come far in 50 years. We shall go far in the next 50.

PUBLICATION OF HANDBOOK ANNOUNCED

FIVE YEARS ago the NOPHN became interested in the preparation of a sound and authoritative manual on industrial nursing. This handbook, *Nursing in Industry*, is now in press, and if the present schedule can be maintained, it will be published by the Commonwealth Fund in the autumn, in time, we hope, for use in fall courses.

Nursing in Industry presents a comprehensive discussion of the problems of an expanding industrial health program and of the duties and responsibilities of nurses in the development of the program. It leads to an understanding of the principles underlying a true industrial health service as distinguished from a first aid service or one meeting only the minimum requirements of the workmen's compensation laws. Sound policies and

procedures of organization and administration are set forth.

The author, Bethel McGrath, R.N., has had long experience as a nurse in industry. In the preparation of the book she has worked closely with an advisory committee of the NOPHN, and she has drawn upon the thinking of industrial and labor leaders, as well as those in the nursing field.

The manuscript, thoughtfully prepared is a ripened presentation of the philosophy and practice of nursing in industry.

Advance orders may be placed with the NOPHN or the Commonwealth Fund, 41 East 57th Street, New York 22, New York. The price has not yet been determined, but according to the Commonwealth Fund's usual practice it will cover only the actual cost.

THE AMERICAN JOURNAL OF NURSING FOR MARCH

The Spirit of the Volunteer . . . Walter Lippmann

Alleviate Your Nursing Shortages with Aides . . . Elizabeth Rath Wilson, R.N.

Psychosomatic Medicine . . . Edward Weiss, M.D.

Home Care of the Sick . . . Lena M. Schermann, R.N.

Child Health Conferences in Utah . . . Ellen Hughes Ryan, R.N.

Newspaper Spotlight on Nursing . . . Florence M. Seder

A Midwifery Delivery Service . . . Frances Fell, R.N.

The Social and Health Aspects of Nursing . . . Irene Carn, R.N.

First-Year Students—Their Education

There is one trait that identifies the true "industrial nurse" and that is that she is "one of the Company." By the time she has been on the job long enough to set up her equipment, she has become one of a work group whose interests and objectives are identical. She too is making whatever her Company makes. The nurse from the silk mills brings swatches of silk to nursing conventions. The silk she helps make is beautiful. The nurse from the cigar factory brings cigars to the committee when physicians are present. These cigars are superior and she is proud of them. The nurse from the transportation company takes a quick look at each street car that comes into view—in off-duty hours as well as during the day—and finds the "standing load" a satisfying sight. Her well-being and that of all her co-workers are bound up in the solvency of the Company.

This characteristic trait highlights the following article, written by Ada Stewart Markolf, the first nurse to be employed by a company in this country ever to give professional care to employees. Mrs. Markolf does not elaborate on the nurse's responsibility in the safety program, for emergency care et al. She assumes that a competent nurse would handle in a professional manner the responsibilities of her position and, instead, her article is rich in description of her Company and enlivened with much local color.

This remarkable article is of utmost interest in other respects also. Still living today and keenly alert, Mrs. Markolf bridges a past that seems remote to nurses of this generation to a present that finds her ideals of service a worthy goal currently workable and desirable.

We are proud to present this article of great historical and personal interest to all nurses from the First Industrial Nurse.—The Editor.

Industrial Nursing Begins in Vermont

BY ADA STEWART MARKOLF, R.N.

AVAILABLE facts seem to indicate that the late nineteenth century saw the beginning of industrial nursing. In small concerns, most employers of labor took a personal interest in the families of their employees as well as in the workers themselves. Before the growth of modern industry, this personal and somewhat paternal care on the part of the employer was quite common.

As time went on and factories grew in size, this personal interest became less and less and the old association was lost. Then the employer began to realize that it was good business as well as humanitarian to try to keep his workers in sound health and see to it that they had proper living conditions and suitable recreation. At first the paternalistic care, quite naturally, was overdone and the employee resented this over-interest in his personal affairs. Then came mutual benefit societies, which, while they saved the workers' self-respect, led to other troubles in the community. One likes to think that "Mr. Fessiwig" was a more usual type of employer than "Ebenezer Scrooge."

When we stop to think that the use of

electricity in industry and even steam is comparatively recent, we realize how rapid has been the development of factories and machinery. With the employment of large groups of workers, the need for industrial nurses has become ever more apparent. Now, most large business concerns employ one or more graduate nurses and factories maintain a first aid room. The help and advice of the nurse has become a large factor in serving to stimulate loyalty and make pleasant relations between employer and employee.

"In the field of nursing, the Vermont Marble Company of Proctor was probably the first to employ an industrial nurse." This is a statement made by Florence S. Wright in the book *Industrial Nursing* published by Macmillan Company in 1912. Who this industrial nurse was, what she did, and how she came to be employed is the theme of my story.

The story of the growth of the marble industry is of intense interest and closely allied to the history of industrial nursing. Prior to the Revolutionary War marble slabs from the ledges of Vermont were

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Three Stewart sisters—Ada, first industrial nurse, Harriet and Florence

used as facings in the pioneer fireplaces. As early as 1759 cemetery headstones were being wedged apart from those same ledges. This led to the opening of a quarry in 1785, the first marble quarry in America.

For nearly a hundred years many different men tried to place the industry on a stable basis. Something always seemed to stand in the way. The first real advance came about fifty years ago, when the organization at Sutherland Falls, the village later called Proctor, became known as the Vermont Marble Company. Under that name the business fought its way into an era of prosperity.

In the early years there was only one quarry in operation and all the blocks were hauled to the mill by oxen. A few scattered houses stood where the village of Proctor now stands. Today, the site of that old mill is marked by a huge group of modern structures, the largest marble manufacturing plant in the world. The company has auxiliary plants from Isle La Motte to Manchester and quarries in Colorado, Montana, and Alaska. The modern plants are all equipped with im-

proved machinery, including adequate overhead cranes for the moving of marble. The danger to life and limb was far greater in the old days before the many safety devices were developed, but considering the number of men employed the accidents were surprisingly few.

Fifty years ago Proctor, Vermont, was a rambling village of typical workmen's houses, painted a uniform dull color and owned and kept in repair by the Vermont Marble Company. Early in the history of the town a fine marble church had been erected which was the first Union Church in New England. True to New England custom, library, school and church were the first permanent buildings to be put up. There were also cooperative stores at Proctor, West Rutland, and Center Rutland which were maintained by the Company for the benefit of the employees. Here they could purchase almost anything from drugs to clothing and furniture, at near cost prices.

IN THE year 1895, Fletcher D. Proctor, who afterwards was governor of Vermont, was president of the Vermont

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Marble Company. This was, and still is, one of New England's largest industrial plants. In Rutland County, where its principal mills and quarries are located, it has always been commonly known as "The Company." With the welfare of his employees a large interest in his life, Mr. Proctor made every effort to inform himself of means to improve the conditions under which they lived and worked. He was a man of broad outlook. He considered the future growth of the business and the good of the increasing number of workers in the plants. He had a remarkable gift of memory for names and probably knew the names and family histories of some three hundred school children in Proctor village.

Through Mr. Proctor's influence, the directors of the Vermont Marble Company had several conferences and came to a decision in regard to employing a "district nurse." The directors had also in view the establishment of a general hospital in the community, although their ideas of the requirements were rather vague. In considering this action, they concluded that the Waltham School of Nursing in Massachusetts was the type best fitted to furnish a nurse suited to their needs.

The Waltham School was instituted with the object of educating young women for "private" and "district" nursing, and of giving to the City of Waltham a visiting nurse service. The School was the crystallization of a dream of Dr. Alfred Worcester. For many years it was unique in that it was the only American school giving special training in visiting nursing. Dr. Worcester, professor at Harvard Medical School, had several interviews with Florence Nightingale, Eva Luckes and other teachers of the art and practice of nursing in England. He also visited Pastor Fleidner's school in Kaiserviertel, before the Waltham School was started. There were no "public health nurses" at the time Mr. Proctor's plan for the Vermont Marble Company employees was being considered.

The result of the conferences of the Company directors was that the superintendent of nurses of the Waltham

School sent Ada M. Stewart, a graduate of the year before, to look over the field as she had had special training in surgical and dispensary work. In March 1895 she was engaged to work among the employees of the Company.

THE NATURE of the marble industry was such that it brought in many people of foreign birth. They were of all classes from the stolid quarrymen to the sculptors. These "carvers" were true artists, mostly of Italian origin. The native Vermonters were largely of Puritan stock. In Proctor there were also Slavs, Irish, Swedes, French, and people of many other nationalities. They were, of course, handicapped by a meager knowledge of our language, but from the first were much interested, and very appreciative of the help and advice of "The Nurse." They were in fact very cordial and friendly wherever she went when they learned how helpful she could be. Probably there were exceptions, as one Jonnie B. was overheard to remark, "Dot Meeshish Stewart, she tink she de whole poosh."

The novelty of the nurse's uniform, and her bicycle, caused considerable interest. Many of the people had never seen a woman ride a wheel. You may be assured that the nurse had a most interesting and absorbing work among the green hills of Proctor and also many amusing experiences. In teaching habits for healthy living, she learned much of the customs and methods of treatment of the sick of the native countries of the people in her care. Both patient and nurse developed a most efficient sign language and a smattering of each other's native tongues. It was in Proctor village that the "district nurse" first became acquainted with "a babe in swaddling clothes" and learned that the object of this bandaging was "to make da baby's leg go straight."

On one of her calls, the nurse found a little woman who did not seem "just right in her mind" and the neighbors were worried about it. It seems this woman had been a dancer in one of Europe's Royal Theaters and had mar-

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ried a musician from the same place. They had come to this country with rosy visions of the future, but the strain and drudgery of housework and childbearing were too much for a "Butterfly" and the young wife had become a drug addict. It was pathetic to see this little woman, dressed in a gauze ballet costume, trying to perform the duties of a housewife.

The teacher of one of the village schools was a personal friend, and the nurse occasionally stopped to see her and visit the school. Sometimes she had a chance to give first aid, as when a little lad cut his finger sharpening a pencil with a jackknife. Once she found a child with a broken bone and the doctor had to be called. At this time the doctor's office was used for a dispensary and first aid room. One day, much to her surprise, the teacher asked her to "make some remarks." So the nurse talked to the children on the first subject which came to her mind, the simple facts of health and right living. The children gave her such undivided attention that it was an inspiration to the speaker. So long ago, health talks were quite a novelty in a country school room and this one soon became front page news in the little village. Mr. Proctor, hearing of it, thought it would be a good idea to make a practice of giving these talks to the pupils of the several schools in town. So it was arranged to have a little talk on hygiene and first aid given in one of the schools each week. This was probably the beginning of "school nursing" in this part of Vermont.

The work in Proctor grew to such an extent that the Vermont Marble Company decided to employ a nurse in West Rutland and Center Rutland where some of their quarries and mills were located. Later in 1895 Harriet W. Stewart, a sister of the Proctor nurse and also a Waltham graduate was engaged to do the "district nursing" in these communities. This service was not limited to employees of the Company although supported by that organization, but other residents, through their family physician, were at liberty to call on the nurse whenever in need of help.

SUCCESS of the visiting nurse service influenced the Vermont Marble Company to undertake the larger enterprise of providing a hospital for its employees and other residents of the community. The public health work has been carried on in connection with the hospital ever since. The hospital was intended primarily for the benefit of the Company's employees and their families, but others, especially residents of the communities where the different branches of the business were located, could be admitted as pay patients. It was the Company's desire that the people of these communities should be interested as generally as possible in the conduct and success of the hospital. Accordingly its management was given over to a representative board of local people who had places on all committees.

The Proctor Hospital opened on August 6, 1896, with Ada M. Stewart as its first matron. The hospital itself was a rebuilt private house and was as well equipped as it was possible in those days to make it. There was a wonderful operating room, finished in Vermont marble, with every convenience which could be obtained at the time. On the day the hospital opened, five typhoid patients were admitted, two of whom could speak no English, all of them more or less delirious. These were hectic days and nights. The matron and her one assistant, Katharine Field, a graduate of the Elliott Hospital at Keene, New Hampshire, cared for the patients as best they could. These two constituted the entire nursing staff—and the visiting nursing must also be carried on in the homes of the sick.

The nurse of today would find it hard to imagine the things with which the first "district nurses" had to contend. In the small towns and villages, telephones in private homes were not common. If a physician was needed, usually someone must go after him, and when he wished to have the nurse's help he sent his "horse and buggy" for her. In Proctor Village the frame houses all had good slate roofs and cisterns built of blocks of marble. They used rain water from these slate

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roofs which was filtered into the marble cisterns. It was good tasting water but it had to be pumped from the cistern by hand. Some houses had wells and a few had running water. Kerosene lamps were used to light the first surgical operations which were usually done on the kitchen table, after the room had been made ready. This process took almost a day as every utensil as well as walls, ceiling and floor had to be thoroughly cleaned and washed with an antiseptic. Usually bowls and pitchers had to be borrowed from the neighbors, who gave their friendly help in these preparations. The towels and dressings were steamed in the wash boiler and baked in the oven of the kitchen stove.

By the old process of "trial and error," the "Proctor District Nurses" went about their daily task of giving advice and comfort, bathing new babies, caring for the mothers, helping in emergencies, dressing wounds and teaching ways of health and good habits in seven languages, as well as they knew. They did not know that they were "industrial nurses" nor did they dream that these and other small beginnings would grow to the splendid work that the modern public health nurses are doing in the world. Probably few public health nurses of today, with the advantage of their special education and the strength of their organization, realize that their success owes something to these small beginnings.

INCLUDING INDUSTRIAL NURSING IN THE BASIC CURRICULUM

MANY INQUIRIES have come to NOPHN from instructors in schools of nursing, industrial physicians, industrial management and nurses themselves concerning the amount of specialized preparation for industrial nursing which might be expected in the basic curriculum. As a result this problem has been given considerable thought by an advisory committee on industrial nursing from the Industrial Nursing Section and representatives of the American Association of Industrial Nursing. Suggestions were made by this group to the Joint Committee of NLNE and the NOPHN on Integration of Social and Health Aspects of Nursing in the Basic Curriculum, and approved by them.

The undergraduate curriculum is intended as a foundation only, containing theory and practice essential in any type of nursing. Its ultimate aim is the preparation of the student to function as a beginner in any of the major fields of nursing. If she wishes to advance to positions of greater responsibility or to a specialized branch of service in any field, she must obtain additional experience and special post-graduate study.

The basic preparation cannot provide for practice in every place where the student may

work later. The only place which universally gives practice is the hospital; experience in other places is dependent upon available resources, the time involved, the complexity of the situation, the availability of adequate nursing supervision, and the maturity of the student.

Because of these factors, as well as the great pressure to shorten the curriculum, it does not seem advisable for schools to add any courses. However, because of the obvious need in the industrial field, it was recommended that schools of nursing examine carefully their own curricula and endeavor to give more emphasis to the industrial implications throughout the entire course of study.

The health program of the school of nursing and of the hospital personnel has, in general, the same aims as an industrial health service. More attention could be given to these as such. The prevention of accidents, and the many first aid and emergency nursing opportunities in the hospital should be emphasized, as well as the application of the workmen's compensation law, as illustrated by the hospital program. Every opportunity or situation should be seized to emphasize the industrial implications of nursing in every theoretical course and in every clinical service.



Part-time Nursing Service to the Small Plant

By

ANNA M. FILLMORE, R.N.

VISTITING NURSE ASSOCIATIONS have gone far enough in developing part-time nursing service for workers in small plants to know that such services are practical. There is still a long way to go if the needs of all these workers throughout the country are met. A few official agencies are experimenting with such service and may be able to solve problems and meet needs in a way that private agencies have not been able to do. But the provision of part-time nursing service by official agencies to meet the total needs of the workers in small plants is probably a long way in the future. Some authorities suggest that even in the smallest plants the nurse should be employed full time and assume the duties of personnel or safety worker in addition to nursing.¹ Probably many small plants already have adopted this plan. How far it will go we do not know. The development of health and social insurance plans may affect the health services in small plants a great deal. Let us hope that all

these plans will be coordinated in any community.

The present labor force in the United States is about 52 million workers. About one-half of these are working in plants under 500 and about a quarter of them in plants under 100 workers.² At least 60 percent of the 2,419,000 workers³ in New York City are said to be in plants employing under 500 with probably 750,000 in plants under 100 employees.

At the peak of the Visiting Nurse Service of New York service to industry, we have reached 6,000 of the million or more workers in these small plants. Reports from visiting nurse associations in other large cities show service to a similar small proportion. We do not know how many are served by a full-time nurse. Until recently none have been served by nurses in the official agencies.

It is probably true, also, that the poorest health conditions exist in the small plants. This can be expected because medical and nursing care, even on a part-time basis, costs more per worker than in a large plant. Also, it is difficult to find medical and nursing personnel for part-time service. And the tendency has been for management to think of the care and

Miss Fillmore is industrial nursing consultant of the Visiting Nurse Service of New York, until recently The Henry Street Visiting Nurse Service.

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prevention of industrial injuries as the total job of the medical personnel. This means that the need of a doctor and nurse seems very minor in comparison with other needs in the plant. After good health service is developed, management begins to realize that the good physician and nurse assist, perhaps indirectly, in the solution of many of the other problems with which he has been struggling: such problems as maintenance of good morale among all employees, proper placement and rehabilitation of workers, and absence from the production line. This is because fewer workers have severe illnesses and more workers like their jobs. Every industrial nurse can add to this list but it is difficult to prove the cash value of medical service in a small plant in such a chaotic period as the present. After the war is over, we shall have to study very carefully the dollar and cents value of health services in small plants and make our findings widely known.

Before we can expect a wide demand for this service in these very small firms, we must convince management and the workers themselves of its practical value. Also, if part-time nursing service from visiting nurse associations is widely developed we must demonstrate that even though the nurse is on the staff of another organization, she becomes an integral part of the plant's family when she is employed by that plant for part-time service. It will also be necessary for the visiting nurse associations to gain the support and understanding of full-time industrial physicians and nurses and their professional organizations. When medical and nursing leaders in the industrial field begin to see that the visiting nurse associations will work closely with them in developing good services and are interested only in the welfare of the worker and not in crowding other groups out of the field, they will actually assist in such programs.

While great expansion of our part-time services to industry must await the post-war period, it may be possible for the visiting nurse services in the United States to continue to develop at least a few demonstration services using nurses not eligible for military duty. Such programs soundly

developed can lay the basis for postwar expansion to the point of meeting the needs of workers in small plants.

PRINCIPLES

From our experience thus far, several principles emerge which may guide us in the development of future nursing service in the small plants:

1. Such service should be planned under the guidance of a representative community group to fit into the needs of the community. The consumers (including labor) and the professions and official agencies providing other industrial health services in the community should be represented.
2. The service should be integrated with the community plan for part-time medical service in the small plants. This includes having a representative of industrial medicine on the medical advisory committee of the visiting nurse service.
3. The nurse giving the part-time service to industrial plants should have training in industrial as well as other aspects of public health.
4. Continuous in-service education and adequate supervision should be provided.
5. The service should be self-supporting—at least after experimental period.

THE ADVISORY COMMITTEE

The formation of an industrial advisory committee is a sound means of carrying out the first principle. The Visiting Nurse Association of Detroit has such a committee. There are probably others. Ours is only a few months old but it has proved stimulating and generous in helping us. Such a committee needs representatives from industrial nursing and medicine, labor and management, official and private health and welfare agencies, departments of health and labor, and other groups which are directly concerned in the industrial health of any community. A lawyer who understands the complexities of the compensation laws is a valuable member.

Because an advisory committee with such wide community representation has a broad view of the needs in the industrial health field, it can guide the visiting nurse association in forming general policies, namely, as to size and type of plants to

be offered service, number of hours of service advisable for each size of plant, and other problems. As the members are practical experts in industrial health they can also help solve specific problems. For example, the committee helped us to define the place of the nurse in the home care of the sick industrial worker. The members also act as interpreters of the agency's program.

Of course all recommendations of an advisory committee must be submitted to the board of directors and the appropriate committees of the agency before they become organization policies. In this process the board and the staff of the visiting nurse service gain understanding of the industrial nursing program.

INTEGRATION WITH MEDICAL SERVICE

The development of the second principle is basic. Not only is the health program better, but the confidence of the workers in the nurse is increased, if she works under the personal guidance of a physician who understands industrial health problems. Our own industrial advisory committee has urged us to accept no contract for part-time nursing service unless a physician is engaged to come into the plant at least once during each week. They have suggested the ratio which is now being tried out by the Office of Industrial Health in Long Island City, an official agency of the New York City Department of Health and the New York State Department of Labor. This ratio establishes a minimum of three hours of nursing service each week for each 100 employees and one hour of medical service each week for each 100 employees. A good deal of adjustment may be necessary for individual plants, at least during the experimental period. For, as yet, we have no scientific studies which establish the amount of service needed in plants of various sizes and with differing health hazards.

If good part-time medical service is to be made available to small industrial plants in the community, the local medical societies must become interested. They can then set up a plan which provides that the physician wanting to do such work will re-

ceive special training if he needs it and that he can place his name on a centrally-placed roster where plants may secure a part-time industrial physician when needed. Although this plan will probably be difficult to carry out until the war is over, there seems to be interest in it in many sections of the country. I believe most local medical societies would be glad to discuss possibilities of cooperation with the local visiting nurse service.

When it is possible to have a good part-time physician in each small plant served by a visiting nurse association there will be fewer problems that need solution by the agency's industrial and medical advisory committees. At least until that time it is very necessary to have a representative of industrial medicine on the agency's medical advisory committee. The chairman of our Industrial Advisory Committee is the representative of industrial medicine on our Medical Advisory Committee. This leads to good coordination between the two.

GUIDANCE AND SUPERVISION

Principles three and four are closely related.

The more we work with management the more we find they appreciate, in fact insist, that the nurses who come into their plants understand industrial health. There are many areas in common between the visiting nurse and the industrial nurse. This is true of all nursing. Caring for the sick, helping the well to keep well, meeting emergencies, teaching and counseling patients in their homes and in mothers' clubs and other group meetings under careful and understanding supervision, increase the skill which the visiting nurse will be able to bring to these same services for industrial employees in their place of work. Teaching and counseling graduate nurses and other students who come to visiting nurse associations for field experience add to the nurse's understanding of people and how to help them learn to do new things. In addition visiting nurses care for many workers ill at home. They become familiar with the common physical and emotional illnesses and the social problems which keep the

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worker away from his job. They learn a great deal concerning his own feelings about his work and his employer.

All of this does not mean that a visiting nurse can walk into an industrial plant and immediately know what to do. She has the same feelings of fear and strangeness that any nurse is likely to feel when she first goes into industrial nursing. When the first worker with a greasy mangled finger spurting blood comes to the dispensary and she knows she must take the whole responsibility for first aid, her stomach turns over and she's likely to think, "I need first aid more than the patient!" Skill in convincing a mother that her baby needs breast milk doesn't mean she can as easily convince Mr. Manager that his welders need a milk-vending machine.

An understanding of the whole field of industrial organization, its interests and aims and the relationships the nurse must establish with all of the management group usually seems a big task even in a small plant. Also the work of the industrial hygiene and safety engineer is closely related to the nurse's work. Added to these the nurse must have an understanding of her relationship with the worker and his union, and at least a glimpse into the intricacies of the compensation law.

And so, the nurse new to industry needs to spend some time observing and working with one or more experienced nurses in a plant which already has a well developed health program. The length of this orientation period and the plant or plants selected depend on the needs of the particular nurse and the kind of plant into which she is going. The process is much easier if she has had at least an introductory course in industrial hygiene and nursing from a university. In a few universities such courses are included in the basic public health curriculum. As industrial nursing courses develop with adequate class and field work, new standards for preparing the nurse to go into industry will be established.

After the nurse is introduced and is working in her first plant, it is a good plan for the consultant or supervisor to see the nurse frequently. A small kit of

reference materials to read and refer to as the nurse gains familiarity with her job is also helpful. Free use of the telephone as problems arise is also necessary. As the nurse gains in experience, she needs less and less guidance and gradually assumes responsibility for calling for help only as she needs it. If a problem arises which needs thorough discussion by all concerned, the plant nurse arranges a conference with management, workers, doctor, nurse and the industrial nursing consultant or supervisor. This has been necessary recently several times in our program in a plant where there has been some misunderstanding about physical examinations. Not all plant executives invite workers to attend such conferences. When they do the program which evolves is usually well supported. Strong trends in management and labor relations are working toward such cooperation.

Group meetings are important for the visiting nurses in industry because they are likely to work more alone in their plants than do the rest of the agency staff. We have held monthly meetings for all of our group. So far we have met as soon as the work day was over, had dinner together at our headquarters, and then spent two hours of hard work on problems common to the whole group. If solving the problem will take too long for the group as a whole, a committee is elected to report back at the next meeting. This past winter we did such things as revise and simplify our record forms, write instructions for recording which all nurses and especially new nurses might use, and evolve a system of simple rates for comparing the total number of calls to the dispensary, the number of accidents and illnesses, and the frequency of severe illness, which might be computed weekly and portrayed graphically to enliven our reports to management.

We started a manual in each plant last year for the use of the relief nurse or any new nurse going into the plant and we have added to it this year. By next year we should complete the job and have a really helpful tool for each of the nurses in the plants. We spent one meeting discussing the common patterns of industrial

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administration and applying them to the plants we were serving. We were able to show that some of our problems in developing a good health program in a plant exist because of certain difficulties in the administration in the plant itself. A professor whose special field is labor laws proved a stimulating speaker on labor problems. So far it has been impossible to schedule these meetings during the working day as is done for the rest of our staff because of conflicts in hours of duty in the various plants. This should be done, however, if the nurses working in industry are expected to comply with other personnel policies of our organization.

More and more we find that the work which is done by the consultant or supervisor before the nurse starts her work in a new plant affects the kind of health program the nurse will be able to develop. For example, if the direct line of authority from the doctor and nurse to top management is clearly understood before the nurse starts work she will avoid much of the friction over the new program which might otherwise be aroused.

Industrial executives are busy people with many problems on their minds besides the health of their workers. Convincing them of the necessity of changes in established procedures or of the importance of new ways of doing things takes a long time, but we find they can often make excellent suggestions during the process. We have two advantages in the small plant. First, the nurse is less liable to be separated from top management by a number of intervening officers. For example, the first vice-president may also be the personnel director so that even though the nurse is responsible to the personnel director, she is also responsible to a top executive. In the second place, the worker, also, is closer to top management so his needs are more apparent.

We find, too, as I emphasized earlier, that it helps a great deal if the plant physician understands clearly what the program is and how the nurse will work under his medical supervision. If he is already acquainted with us and our policies, he and the new nurse, the two people most closely associated in the development of the

health program in this small plant, are already off to a good start.

The written agreement or contract which is made with management should help to secure the relationships mentioned as well as a comfortable place to work and all necessary equipment.

SERVICE SHOULD BE SELF-SUPPORTING

Most visiting nurse associations intend to make the industrial service pay for itself. The amount charged for each hour of service seems to vary a good deal. While the cost of the service will always vary in different communities, the formula for estimating the cost could be standardized and should prove reliable wherever it is used. A subcommittee of the NOPHN Cost Analyses Committee is studying this question.

The amount we charged the first year fell far short of meeting the cost. The second year was better. Recently, Mabel Reid, our statistician, worked out a formula which we hope will be more accurate. (Fig. 1.) It probably does not include the total cost of supervision and promotion which are always expensive. Conversely, the plants we want to reach are not able to pay high rates for service, and we do not want to defeat our program by charging too much.

The amount charged for each hour of service includes our agency's share in payment for the nurse's sickness and accident insurance, workmen's compensation, physical examinations and other health services, relief during sick leaves and vacations, supervision, some statistical and clerical service, and other items listed in the formula.

MANAGEMENT VALUES THE SERVICE

Some aspects of the visiting nurse service to industry which we have found management especially values are:

1. Finding that the visiting nurse who comes to the plant fits into the plant's family easily and that she is mature and knows her job.
2. That the supervision given to the nurses does not interfere with the plant policies, but helps in the smooth operation of the plant health service. They

FORMULA FOR COMPUTING COST OF PART-TIME NURSING SERVICE TO INDUSTRY

Figure 1.

The cost of providing part-time nursing service to industrial plants is the sum of three factors (1) the salary of the nurse assigned (2) the salary of the nurse who relieves during vacation and sick leave (3) a portion of the organization's overhead expense.

The amount of the salary items (1) and (2) is based upon the following time factors: (a) actual time spent in the plant, (b) travel time to the plant at organization expense, and (c) a pro rata share of vacation and sick time, e.g., if a nurse spends half time in industry, half her vacation and sick time salary is charged to industry.

The amount of overhead expense charged to the industrial nursing program depends upon the proportion of the total working time of staff nurses which is spent in plant nursing, and upon the amount of overhead expense which it shares. These factors vary with the organization program. In 1943, approximately 5 percent of the total working time of staff nurses was spent in industrial work, and the following items in the organization budget were shared by the industrial program:

Administrative salaries (director and assistant)

Special supervisory salaries (industrial consultant, nutrition consultant, personnel assistant, statistician)

Clerical salaries at Central Office

Rent and related expense at Central Office

Office expenses (telephone and postage) at Central Office

Miscellaneous items relating to Central Office and general staff (insurance, physical exams, library, auditor, etc.)

The industrial program shared no part of the remaining items in the budget such as salaries of educational assistant, borough advisers, center supervisors and center clerks, rent and related expenses for center offices, center office telephone and postage expense, transportation expense, the cost of nursing supplies, and publicity and fund raising expense:

Formula

$$\text{Cost} = (a+b+c) S + (a'+b'+c') S' - \frac{(a+b+a'+b')}{\text{Overhead expense shared by industry}} \times \frac{\text{Total working time of staff nurses}}{\text{Total working time of staff nurses}}$$

where

a = Actual time spent in plant by assigned nurse

b = Travel time to plant during day by assigned nurse at organization expense
 $\frac{a+b}{a+b}$

c = $\frac{\text{Total working time of assigned nurse}}{\text{Total working time of assigned nurse}} \times$ Vacation and sick time for assigned nurse

S = Salary of assigned nurse for time unit used in a, b and c

a' = Actual time spent in plant by relief nurse

b' = Travel time to plant during day by relief nurse at organization expense
 $\frac{a'+b'}{a'+b'}$

c' = $\frac{\text{Total working time of relief nurse}}{\text{Total working time of relief nurse}} \times$ Vacation and sick time for relief nurse

S' = Salary of relief nurse for time unit used in a', b' and c'

The computation should cover a full year's experience in order to have a complete record of the sick time actually used and to spread the cost of vacation equitably.

—Formulated by MABEL REID, Statistician
Visiting Nurse Service of New York

often remark that the service "runs like clock work."

3. Automatic relief during the plant nurse's vacation or illness. This is especially important during a shortage of nurses in the community.

4. That the part-time nurse can take over the responsibility for the training and supervision of first aid workers. That she can help management to plan for an efficient way of carrying out first aid in the plant during all shifts even though she is actually in the plant during a part of one shift only.

5. That the nurse knows what to do in "delicate situations."

The term "delicate situations" puzzled me when our first managers used it, but as I collected examples, it referred to such things as the following:

A valued worker is overindulging in liquor, and the nurse is able to refer him to a community agency which helps him to control his alcoholism after many other efforts have failed.

A father is left with three minor children because his wife has been sent to a mental hospital. His family are inter-

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ing and he is very resistant both in telling anyone about his wife, or in finding adequate care for his children. The plant nurse is able to solve this through asking a nurse in another center to visit the home and then by using social agencies in the community.

6. Team work between plant nurse and the nurse who gives nursing care at home for sick workers or who helps with problems of other members of the family at home to prevent absenteeism. Most plans for complete health service to industry include provision for home nursing service to the employees.

HOME NURSING SERVICE

While the original intent of the various plans for visiting sick workers in their homes was no doubt designed to promote and improve the health of the workers, the use of nursing service to investigate the reason for illness or absence and only incidentally to give nursing care has become rather general during the past several years. War pressures increased the demand for some control of absenteeism. Home visits by the nurse did as a rule reduce time lost from the plant. Even with efforts to control their use our home visits to industrial employees increased 400 percent during 1943.

We, ourselves, thought at one time that visits to all workers absent from the plant or reporting ill, but not specifically requesting the nurse, would show profitable results in health service given to the worker or his family. This has not proved to be true. From 25 to 35 percent of the employees are not found or not at home; poor attitudes tend to develop between the nurse and the worker; and comparatively little nursing care or teaching is possible, as long as the employee thinks the nurse is "checking up on him."

At its first meeting our Industrial Advisory Committee took a strong stand against the use of the nurse for the investigation of absence or illness. Our Board agreed with the Industrial Advisory Committee. We are now concentrating on this problem in cooperation with the insurance companies offering nursing service under group insurance contracts and with the other visiting nurse associa-

tions in the Greater New York area. We hope to achieve sound use of the nurse for the home care of the sick employee through frank discussions with management, admitting our own share in allowing the problem to develop and enlisting managements' help in necessary changes.

The present shortage of nurses makes such reform imperative. Firms working under great pressure and with their own manpower shortage at its worst will undoubtedly be disturbed. It will probably mean loss of a block of earned income for our agency for at least a year or two. But in the end the quality of our service will be improved. And the preservation of the professional, confidential relationship between nurse and patient should eventually result in increased demand for the help she can give, perhaps under health insurance or other plans for home nursing care.

SOME PROBLEMS IN ADMINISTRATION

We have said a good deal about generalization of our public health nursing services. A visiting nurse association never carries a completely generalized program unless it provides service for the official agency which is true in very few communities. Yet it is interesting to note how often staff nurses feel under too much pressure while attempting to do good work in the various services carried by a visiting nurse association. This is one of the problems in our industrial nursing program.

If the nurse is in her district part of the day and in the plant part of the day, the pressure of work in each is great during the same part of the year and she has difficulty in meeting the needs of both the plant and the patients she cares for at home. The advantages of this arrangement are that the nurse's time can be adjusted more easily and that the plant health work can be integrated into the health work in the district. The latter is not true in a large city where workers live a long distance from their place of employment.

If one nurse serves several small plants and carries no home nursing responsibility it tends to make her a specialist on the staff. However, some of our nurses find such an arrangement more satisfying and less fatiguing than the

PART-TIME SERVICE

plan mentioned above. We are trying both ways of providing service, realizing we need to keep an open mind about which way is better until we have more experience and data upon which to base conclusions.

PROMOTION OF THE PROGRAM

During a time when expansion of part-time services is limited by present conditions, it is difficult to experiment with methods for promoting the program. Individual letters to a few of the plants we wanted to serve brought good results in the early part of our program. Insurance companies, committee members, other health and social agencies in the community have referred to us plants which needed service. Wide association of both administrators and staff in civic affairs, industrial conventions, and local club activities should offer innumerable opportunities to interpret the service and lead to a good demand for it. Nursing is highly organized and we tend to become so deeply involved in national, state and local nursing affairs that we lost contact with other groups in our own community. This is probably more true in the larger than in smaller cities.

From recent discussions with representatives of trade associations and labor unions, I believe these groups and their publications will prove excellent sources through which to reach the people we want to serve when we have enough nurses. Our Industrial Advisory Committee with its broad and varied representation will guide us wisely when we are ready to proceed.

CONCLUSION

Health service to the workers in small plants throughout the country is one of the most challenging problems in the public health field today. Visiting nurse associations have a worth-while contribution to make to it. Because of war pressures, the solution of the problem will not be possible till after the war. But we can preserve what is sound in the services we have already developed and perhaps carry a few demonstration serv-

ices which will teach us to meet the problem wisely when it can be solved.

In no other area is it more imperative that all groups interested work together. Who is to do what, or exactly how it is to be done, must be carefully considered in each community. Medical, engineering, and nursing services are all a part of one whole and must be coordinated in the voluntary agencies as well as the official. Management and labor have much to teach us, as do all of the branches of the personnel services which have developed in industry. Let's form a good team and get the job done—as soon as the war is over.

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Amputation Stumps and Prostheses

By MANDELL SHIMBERG, M.D.

IT IS ONE of the tragic consequences of our high-gearred modern life that many of our people, both young and old, lose one or more limbs in the course of their life span. The word amputation is derived from the Latin preposition *ambi*, around; and the verb *putare*, to prune. The history of amputations is very interesting, and much is found in ancient writings concerning them. Man, ever ready to step into any breach, had perforce to call upon his ingenuity to replace the lost limbs with some mechanism which would approximate their use. Thus the science of Prosthetics was born. *Prosthesis* is a Greek word meaning an addition. Thus a synthetic limb is made to replace the lost member. If you are interested in the history of prostheses, and you should be, I would advise you to read Dr. Bernard J. Ficarra's article "Amputations and Prostheses through the Centuries."* It will stimulate your interest in this subject. It is fascinating to follow the progress from the clumsy and heavy artificial legs wrought by the ancient armorers to the highly efficient but simple legs of today. Or compare the heavy iron glove of the German Knight Gottfried von Berlichingen, immortalized by Goethe, to the arm of the present era. In your childhood you read of Moby Dick and the whaling skipper who hunted him, and of Long John Silver in Stevenson's *Treasure Island*. You remember that both the Captain and John Silver wore peg legs on which they were at least able to navigate.

As orthopedic nurses you will come into contact with many, young and old, who must wear artificial limbs. It is your aim to be of help to them and therefore you, yourselves, must be well acquainted

with the principles underlying the use of these limbs. Often the comfort of these people will depend on your knowledge. Too often a doctor is not readily available to give them proper advice and it will fall upon you to guide them. The subject is highly specialized, and unfortunately few regular practitioners have had sufficient experience to pass upon the efficiency of artificial limbs. Then, even though you cannot be expected to be a limbemaker, you should know something about the mechanism of these limbs, and be able to give them a little bit of first aid. In isolated communities the village blacksmith must serve as repairman and he may need guidance. Then again many of the limbless have never been taught to care for their stumps and their stump socks properly, and this may give rise to much discomfort and even disability. Therefore, it is my purpose briefly to take you behind the scenes and give you a slight insight into some of these things.

THE STUMP

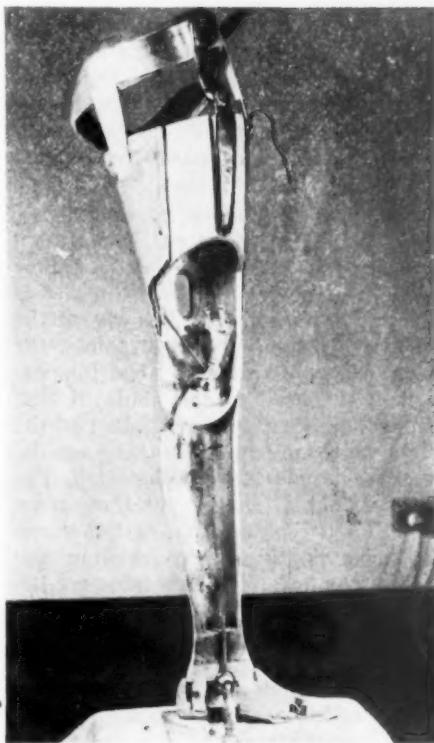
The basic factor in amputations is the stump, or the part which remains of the limb. It should be the duty of every surgeon who does an amputation to look ahead to that time when the patient will wear an artificial limb. He must fashion a stump which will carry his patient through life with a maximum of efficiency compatible with his disability. This stump must have several inherent qualities. It should be of approximately the right length. There is often a tendency on the part of surgeons to leave as much of the limb as possible, and this is unfortunate. There are optimum sites for amputations. In the lower leg, below the

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*Ficarra, Bernard J. "Amputations and Prostheses through the Centuries." *Medical Record*, February, March, April, 1943, pp. 94-97, 154-156, 239-240.

STUMPS AND PROSTHESES

knee, the ideal length of a stump so as to provide optimum function is around seven inches. If the stump is too long the circulation at the end is poor; it becomes tender and sensitive and does not withstand the pressure of the prosthesis well. I have seen a satisfactory below knee leg made with a 1½-inch stump. When we come to above knee amputations it is important again that the stump is not too long. In order to fit an efficient leg an artificial knee mechanism must be inserted, and therefore, if the leg has been cut off too close to the knee there will be no room for this knee box, as we call it, and the limb maker must resort to clumsier methods. The ideal thigh stump should be long enough to give good leverage and short enough to permit joints and controls inside the knee. Again even a very short thigh stump can be satisfactorily employed. The ideal thigh stump is one between the middle and the lower third of the thigh. It is important that the skin fit snugly around the end of the stump. Too much of a pad of soft tissue at the end of the bone is a real handicap to the wearer of an artificial limb. You may feel that this all is of little interest to you; that it is the concern of the doctor. But please bear in mind that if the foundation of a building is ill conceived, then the edifice will be bad. The stump of an amputated leg is like that foundation. On it the limb-maker must work. Upon the success of the limbmaker's work depends the happiness of your patient. Therefore, I want to say to you that whenever you see a stump which does not conform to the specifications I have briefly outlined you should advise your patient to see an orthopedist with a view to revision of that stump. A short period of disability is preferable to a lifetime of misery. In the course of many years in this line of work I have seen too many men and women carrying the cross of a bad stump with all the attendant evils. Usually they had carried it for many years when I first saw them and were hesitant about an operation. They could have been saved much suffering if some informed person had directed them upon the right road early. You may ask how you, as nurses,



Sagittal section of above knee leg with hip control

can know the right and the wrong. If the patient is having frequent difficulty, is laid up for periods when he cannot wear his prosthesis, then consider well the stump.

ARTIFICIAL LIMBS

What are legs made of, and how are they constructed? Legs may be made of several materials: wood, metal, fibre, leather, and plastic. Much has been written and said about the advantages of each. Personally we use the wooden leg. It is made usually of willow wood which is light and easy to work. It must be hand tailored, and, as you know, a suit rarely is right at the first fitting. There always are kinks to be ironed out, adjustments to be made here and there. Above all, the patient himself must admit freely that the leg is comfortable. No leg is right unless it feels comfortable to the wearer. Too often a limbaker tells the patient that the leg is all right in spite of the patient's complaints. If your patient

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complains that his leg pains; that after a reasonable period of time he is not comfortable, then get in touch with the maker and insist that he make it right. I have never seen a patient who, with persistence, could not be made to wear his limb in comfort.

Let us first examine the construction of a below knee leg. The patient's stump, covered with a sock, fits into a hollow socket. The proper fit of this socket is all-important. The entire weight of the patient rests upon two bony points, the under surface of the inner tibial tuberosity, and the head of the fibula, if that bone has not been removed. Part of the weight may sometimes be taken on the corset which goes around the thigh. The socket should fit snugly but there must not be undue constriction, or the stump will choke up, leading to swelling and much discomfort. The skin must not become too red or irritated. If you notice this occurrence, and undue swelling when the patient removes the leg, then these are danger signals and the limb-maker must be called in. Again you must realize that a stump shrinks in size for a considerable time after legwearing is begun, even for as long as ten years. That means that the patient, after wearing one stump sock, puts on two, three, and even four to raise the stump. This is bad. Two stump socks should be the maximum. After that the patient must consult the legmaker and have a lining put in the socket. That will not suffice after a time, and a new socket must be made. I wish to point out to you that if the skin over the end of the stump becomes hard and indurated it points to a faulty socket and the leg needs attention.

Coming up from each side of the socket are two joints which attach to a leather cuff which surrounds the thigh. This may be short or long. It should be laced snugly, neither too tight nor too loose. In below knee legs the socket goes down to the ankle and an ankle bolt connects it to the foot piece. This ankle joint is made in such a way that normal ankle motion can occur. There are several complications which might be introduced here, but I wish to make this explanation

simple. In the heel of the foot there is a thick cylinder of rubber which allows the leg to rock back and forth and in front there is a piece of felt. In order to allow toe motion a V is cut through the forefoot and special rubber and other material is placed in this V so as to allow the patient to raise up on his ersatz toes in a normal fashion. On the bottom of the heel there is placed a piece of hard rubber. What can go wrong mechanically? The joints can become loose, and wear out; the rubber and other material will deteriorate. After all, the leg is a piece of mechanism and it needs some care. If the foot becomes loose it needs tightening; if it squeaks it needs greasing. If the wood cracks it must be attended to soon or the leg may fall apart.

An above knee leg is more complicated, for here we must have an artificial knee joint as well as some means of holding it to the body. Again we have the socket and actually the patient sits on the posterior lip of the socket. This lip must rest under the ischium and unless this is the case the leg does not fit. How then is the leg held to the body? There are two methods, one by means of suspenders going over the shoulders, and the other far preferable method, by means of a hip control. This hip control consists of a belt made of aluminum and leather which fits around the pelvis, with an arm fastened to a hip-level joint connected onto the leg. From each end of this pelvic band there are straps which loop around a central knee control situated inside the knee. In this way the leg is held firmly to the patient, and he is enabled to control his artificial knee in whatever position he may be. It sounds complicated but a look at the illustration will make it clear. The construction of the lower part of this leg is the same as I described before. Here we have necessary complications and the mechanical parts added need regular attention.

CARE OF PROSTHESIS AND STUMP

You now know as much as is necessary about the insides of legs. There is of course much more to the story. Men with amputations suffer from complaints with

STUMPS AND PROSTHESES

which you should be familiar. Often they are worried because their stumps jerk up and down at times in a very annoying fashion. This is nothing serious, and the condition will disappear of its own accord and perhaps not recur for months. There may be pain at the end of the stump. If, after simple remedies such as soaking the stump in hot water, the pain persists for a long period of time, it is possible that there has formed in the soft tissues a neuroma which needs surgical care. Phantom pain is often present, and the patient can actually feel the missing member. This usually disappears after he has worn a leg for a period, but may recur at intervals.

The care a patient must take of his stump is important. Injury and abuse must be avoided. If soreness or irritation develops he must discontinue wearing the limb until this has cleared up. The stump should be washed with mild soap and water at least twice a day, dried thoroughly and sprinkled with talcum powder. This is especially true in hot weather. Many people have very irritating perspiration.

The use and care of stump socks is all important, in fact as important as any one thing. First the socks should be of the right size, and the size must be remembered. Then they should be changed once or more a day depending upon the weather. They should be washed after each wearing. A good grade of soap flakes, suitable to wool, is used. They should not be washed harshly. Every particle of the soap must be rinsed out. The socks are then placed on a flat surface to dry and smoothed out carefully to prevent wrinkling.

Two more things about legs. The weight of legs is of some interest. The average below knee leg should weigh about 5 lbs., while an above knee leg should weigh about 7½ lbs. or less. There is some misconception as to the price of legs. The public as a whole feels that the more expensive a leg, the better it is. I think that the best leg obtainable can be made at a moderate cost, and the various extra gadgets add little to the real efficiency of a leg.

I know that you deal with growing children and here the problem of growth must be considered. As a child grows the prosthesis which doesn't change becomes shorter than the flesh and blood leg. Therefore, when the child starts to develop a marked limp steps must be taken to add something to the prosthesis. This is accomplished by the limbmaker adding a section of wood to the leg in the proper place. It may have to be done two or three times and then a new leg is required. Children develop bad walking habits if this matter is neglected.

LEARNING TO WALK

Now I feel that one of your functions as nurses is the rehabilitation of the amputee. A man can be given a good leg, but develop bad walking habits, and never get the full use of his leg. Among our numerous cases in the Veterans Administration we have good walkers and bad walkers. It all depends on what happened at the beginning of prosthetic life. A bad walker seldom becomes a good walker. I do not think this is the place to go into detail about how to teach these people to walk. However, I think you should devote some attention to how this is done. Watch your amputees and see how they walk. You can distinguish the good walkers from the bad. Get at them early and teach them good habits. Encourage them to learn dancing. I am a firm believer in dancing for the legless. It helps both from a physical and morale standpoint. These people don't want to be thought of as cripples. They want to be normal human beings living a full life with, and in spite of their disability.

PROSTHESIS FOR THE UPPER EXTREMITY

I always have felt that our conception of prosthesis for loss of hands and arms has lagged behind scientific progress. The problem here is entirely different from that presented by the loss of a leg or legs. In legless people the entire problem lies in comfortable walking; but in the case of the upper extremity there are many other factors. Not only must we fit the artificial arm to the stump but also we must fit it to the man's

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economic state, to his work, his hobbies, and the part he will play in our complex life.

There are two types of artificial arms, the mechanical and the nonmechanical. In the mechanical arm the patient is able to open and close the hand and there is a limited amount of true function. In the non-mechanical arm there is no movable hand, and its place is taken by hook, grips, tool holders, and the like. These devices, scientifically employed, rehabilitate the wearer better than the mechanical arm and hand.

I would like to go into considerably more detail regarding the matters outlined above. One of the prime factors in wearing an upper extremity prosthesis is the weight of that prosthesis. It is a fact that the best mechanical arms on the market are very heavy and in my experience the wearers often become disgusted with the weight which they must carry and soon discard the apparatus. A good mechanical arm with all its complex parts for an amputation above the elbow weighs around $3\frac{1}{2}$ pounds. It takes a hardy stump and man to carry this weight, especially as a great deal of it is centered in its most dependent part, the hand, which weighs more than a pound.

Recently there has been developed within the Veterans Administration an arm made out of a plastic, a non-mechanical arm. This plastic enables us to make a full arm with cosmetic hand attached which weighs a little over two pounds. This arm is comfortable to wear and has proved satisfactory to a number of the casualties of this war.

What are we looking for in a prosthesis for the upper extremity? I would say practical use and cosmetic appearance. Let us first examine what we mean by cosmetic appearance. A man who has lost an arm does not wish to be conspicuous. The empty sleeve must be filled up, but further it is of some importance that he be provided with some sort of hand which will simulate its flesh and blood mate. In the past the wearer of an artificial arm wore a glove over the prosthesis. He was the "Marked man with the tell-tale glove." Now a cosmetic

hand has been developed which is made of latex with no seams, and which resembles to a remarkable degree the true hand. The fingers which are non-mechanical are flexible and can hold objects. I know of one man who uses it to shift levers in an automobile. It is a very close imitation of the real thing, and can fool most people. It even has finger prints, hair, veins and all the exact markings of the natural hand. It is truly cosmetic. The color is fast, and no makeup is required. I think that this is a step forward in our treatment of the armless.

MAKING THE HAND AND ARM FUNCTION

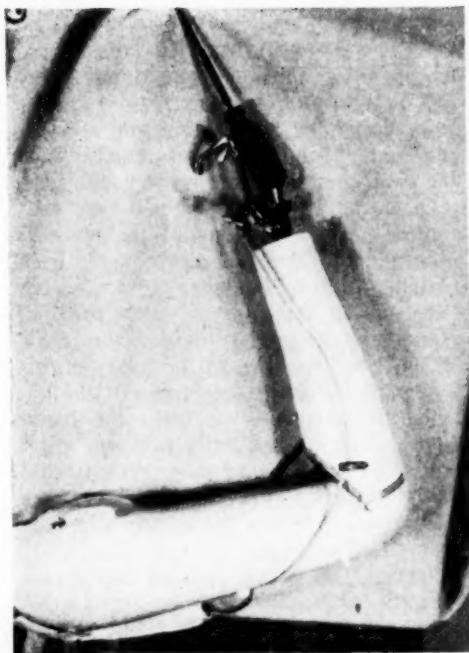
How about function? No satisfactory substitute for a real hand has been made. Yet a man with one or, even more so, with two arms off, wants to do things, to work and earn a living. The prosthetist must help this man to solve his problem of daily living. What then is the proper procedure to follow?

It is essential that the arm provided must fit the particular requirements of the individual case. A farmer needs different care than the worker at a desk, the man who does manual work, a different conception than the brain worker. Therefore the first thing is to determine what the probable life of any particular patient is going to be. One should determine very carefully the various things which that individual must do in order to earn his living and pursue his hobbies. These must be determined in detail.

First of all, what kind of a stump does the patient possess? A man who has less than a 4-inch stump below the shoulder cannot expect to use any mechanical device to help him in his daily routine. This man should be provided with the lightest arm possible with a suitable cosmetic hand. It is senseless to cumber him with gadgets which he will be unable to use.

If, however, the man has a stump which is suitable, then we should build him a light, non-mechanical arm and provide him with specific devices which will enable him to carry on. These tools, hooks, and adaptors must be readily detachable so that he can insert the proper

STUMPS AND PROSTHESES



Plastic arm with (1) David hook and (2) cosmetic hand

one for the work he is doing at the time. When he goes out to a dance he slips in the cosmetic hand and looks presentable. The English have made far more progress than we have in this respect. Their bi-armless people carry a kit box with them with all the gadgets they require and slip them off and on as necessary. Dr. Kelham, the Chief of English Government service, tells me that they have a number of bilateral amputees leading a full life and making an excellent living. There is a famous American veteran of the last war who has a bilateral arm amputation and uses two hooks. He can do almost everything with these hooks that you and I can do except play the piano. He ties his shoelaces and buttons his vest, combs his hair, shaves, eats, smokes, writes, works at his job and earns a full living. It can be done if the man has the patience and perseverance to learn, but it isn't easy. These people should be given a full course of instruction by some competent authority. This is within the realm of occupational therapy.

PERSONAL ADJUSTMENTS OF THE ARMLESS

I have touched but lightly upon the many problems of the armless. They will seek your advice in their need. Many salesmen of artificial arms will haunt them trying to sell their own particular product. All these products have their merits, and I would not decry them. However, again I must stress to you that each case presents a different problem. What is suitable for the man with a good stump well below the elbow is utterly impracticable for the man who has a very short and often tender stump just below the shoulder. It is worse than useless for the latter individual to spend a great deal of money for a heavy complicated mechanical arm, no matter what the salesman may say. It is up to you diligently to explain to this man that the only thing he can hope for is to fill up his sleeve, look like a normal person and be satisfied with that. The problem is complex and a special organization for the armless is needed to be set up with personnel who are aware of their problems and who know how to solve them. The

ultima thule is as much function as the man can carry and proper cosmetic appearance. This latter consideration makes for better morale, and in our experience this is of great moment. It is depressing to be conscious at all times of the fact that the next fellow knows you have lost an arm and feels sorry for you. Do everything you can for these people. Their gratitude will well repay your efforts.

One of the main duties of the nurse is to impress upon amputees the fact that they are not to regard themselves as cripples. Their usefulness in the great majority of cases is limited only by their own initiative. This is especially true with people who have lost arms.

PREPARATION FOR LIMB FITTING

It may be that at times you will be confronted with cases recently discharged from a hospital after amputation. There is a period of time which must elapse between discharge and limb fitting. Often detailed instructions have not been issued to these people by the surgeon. In the case of a leg it is about 3 months before the stump is ready for limb fitting. In healthy individuals, I think this time can be cut down, but many amputees will be arteriosclerotics and diabetics and victims of Buerger's disease.

There are certain criteria by which it may be determined when an artificial leg may be fitted. First, the wound must be well healed and the scar should be whitish, with little or no blanching when pressed. Then the stump must not cause pain when firmly grasped. There should be no edema present. The stump should have shrunk sufficiently. How are you to determine this last point? It is a little difficult. But if by observation and measurement there has been no change in size of the stump for two to three weeks then all is probably well and the man is ready for limb fitting.

The care of the stump during this period of waiting is important. It must be kept constantly bandaged with an Ace type of bandage. This should not be done haphazardly. In below the knee amputation you should start from the end of the

stump and bandage upwards making every turn snug. The bandage should be reapplied three or four times a day and be tight at all times.

In upper leg amputation you start at the bottom and work upwards, carrying the bandage around the waist in the form of a spica. Let me warn you here that the way you carry around the waist is important. You must never work from without inwards, but always from within outwards so that, as you carry the fold around the body, it runs from the inside around the iliac crest to the back. In this way you will not cause flexion of the hip which is detrimental. Again the bandage must be washed daily in warm water and white soap, rinsed thoroughly in cold water and dried between soft towels on a flat surface. When thoroughly dry it is then rolled up firmly.

During this period it is of importance that the patient be made to exercise his stump for about one hour a day in two periods. He should go through a full range of motion of the joint or joints proximal to the amputation. This conscientious exercise is of real importance. If you can rig up some contraption so that he can exercise against weights it is useful. This is important in that it keeps the muscles supple, active, and well supplied with blood.

In the case of arm amputations the arm should be fitted within six weeks of the amputation in the great majority of cases. The longer the period of waiting the more difficult it is to use the new arm. The care of the stump is much like that in the lower extremity.

CARE OF PROSTHESES

A word should be said here about the care of prostheses. Remember that they are pieces of mechanism and should be properly cared for. The patient is usually supplied with a wrench so that he can keep the knee and ankle joints sufficiently tight. He may learn to grease the prosthesis so as to keep the moving parts properly lubricated, and prevent those annoying squeaks which so often occur. If he is close by his legmaker he should drop in there at times and let the

mechanic look the appliance over. He should be particularly careful to see that the limb does not become wet as this may ruin it. It should be carefully handled at all times and not thrown around like an old shoe. It is expensive and the better care taken of it, the longer it will last.

Usually it is necessary to buy about three stump socks every three months. Much of your patient's comfort will depend on the proper use and care of these socks. Examine them carefully when you see your patient, and be sure that they are not torn or rough or badly worn. Impress upon the new amputees that they must keep the socks snug except at the end, and never allow wrinkles to creep in. Wrinkles spell irritation.

You may well ask how long a leg can be expected to last if given proper care. Of course this depends upon the amount of strain it bears, and the work that its master does. As a working estimate I would say that given decent care and in the average case a leg will last from three to ten years. It is rare that a new leg is justified under three years. Of course new sockets may have to be made and adjustments effected. If your patient is getting true comfort out of his leg, dissuade him, if possible, from changing it for something else. A leg can be just so good and no better. The gauge of its quality is in direct proportion to the comfort it gives. The addition of gadgets, as I said before, introduces more things to take care of which are of little real value. Be sure that its weight is approximately correct, but bear in mind that a heavy man needs a heavier leg and vice versa.

You may find occasionally that some person with limited income will try to use someone else's discarded leg. This is a bad practice like trying the other fellow's medicine or his eyeglasses. I saw one such patient who ruined his stump wearing a right artificial leg on a left stump. Again you may find people who are too lazy to learn to use a good leg and resort to the peg variety. This ruins them for future walking with a proper leg.

Dr. Ficarra summed up well the subject of the amputee when he said:

The day has passed when our duty terminates at the bedside of the amputated patient. There must be perfect cooperation between the surgeon and the artisan [and I may add here the orthopedic nurse]. One aims at providing an ideal stump and the other is employing his ingenuity to fit an appliance as functionally perfect as possible. The amputation and prosthetic problems remain among our most creative surgical topics, pre-eminent from a combined medical, social and economic viewpoint. Today the vision of medicine is panoramic. The day is gone when the man of medicine concerns himself solely with the treatment of his patient. The modern doctor is not only a healer, but a psychologist, a sociologist, and an economic adviser on many occasions.

As I understand your function as orthopedic nurses you must often take the place of the doctor. You must understand the problem of the amputee in its multi-faceted aspects. You must be his only adviser on a number of occasions. You must help him to interpret the danger signals so that more competent authority can be called in to advise. It is up to you to enable him to avoid the pitfalls of too strenuous commercial competition and to evaluate these things properly.

He will come to you for advice and your advice must be founded on sound if not intricate knowledge. Above all you must play a part in his rehabilitation so that he can face life with courage, confidence and a feeling of security.

I trust that I have given you some incentive to go more fully into the problems of the amputee, and learn much more about them. Do not be satisfied just to have a smattering of knowledge about this subject. Get acquainted with the limbaker in your immediate vicinity, learn his viewpoint and help him to care for your patient. Above all teach your charges that they are not cripples, but that, although they have met with misfortune, they still can keep their heads high and share that full life with which we all have been blessed.

Paper presented at the Conference on Orthopedic Nursing, October 2, 1944, New York City and published with permission of the medical director, Veterans Administration, who assumes no responsibility for the opinions expressed.

The Newer Occupational Diseases

By LOUIS W. SPOLYAR, M.D.

In DISCUSSING occupational diseases with nurses in their own plant dispensaries, and further in lecturing to nurses in graduate industrial nursing classes offered by the Extension Division of Indiana University, I found that for one reason or another the average industrial nurse has little or no knowledge of the old stand-by industrial diseases, or of the newer ones coming on today. Analysis of the reasons for this lack of knowledge revealed that the average nurse has a high dispensary case load, does not have enough conferences with the plant physician so that such diseases may be discussed and, finally, is so physically tired at the end of her working period that she just doesn't care to read a great deal. Further, investigation of the nursing journals showed a scarcity of papers dealing with occupational diseases.

Because industrial nurses generally see the dispensary cases first, it is very important that they know what industrial diseases are current so that they may readily recognize prodromal symptoms of a given disease rather than treat the case symptomatically and dismiss it as just a skin disease, headache, or gastric upset. The recognition of prodromal symptoms will insure early, adequate and proper treatment as well as the institution of early control measures on the job. For this reason I believe the following resumé of the newer occupational diseases may be of value to industrial nurses for through it they may better understand some of the symptoms and diseases they may be seeing in the dispensary.

This is truly a resumé and as such minute details will be omitted. Such details may be found in the original works

listed in the bibliography. Further discussions as to prevention and treatment were omitted for these again can be found in the works cited.

INDUSTRIAL SKIN DISEASES

Industrial skin diseases account for 60 to 85 percent of all industrial diseases seen in a dispensary or reported to compensation boards.¹ Therefore it can be readily understood that the major portion of this resumé will concern this group of diseases.

Aluminum: Terms such as "aluminum poisoning" or "dural poisoning" have been coined ill-advisedly by aircraft workers and by some physicians. Actually Hall² has shown that only 5 percent of all such cases of dermatitis are due to dural and 2 percent to aluminum. The skin diseases seen and called aluminum poisoning were actually due to contact with materials placed on the aluminum sheets, such as paints containing zinc chromate and resins, or the fish oils used to prevent corrosion. Schwartz³ is of the opinion that a tertiary phenolic amine is present in this oil and that this, or similar compounds, produces an irritant as well as a sensitizing dermatitis. In general one may safely say that there is no such disease as "aluminum poisoning."

Canvas and Canvas Products: One hears phrases such as "pack poisoning," "hammock poisoning" or "canvas poisoning" and is at a loss to understand them, for such diseases were rare in the canvas industry prior to the war. Today they are bona fide terms for it has been shown that a frequent cause of dermatitis in this industry is due to the workers' contact with canvas impregnated with various anti-mildew agents, such as copper naphthenate.⁴ Such canvas is designed for the tropics. Other anti-mildew agents used are: mercury phenyl oleate,

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zinc naphthenate, penta chlorphenol, and aminoguiaicol benzothiazol. All are capable of producing a dermatitis.

Insulating Varnish: In the electrical industry manufacturing motors, transformers and condensers, one frequently sees a dermatitis that simulates poison ivy. It has been found that this type of dermatitis is due to the insulating varnish used, which is essentially a mixture of cashew nut shell oil and formaldehyde. The cashew nut shell oil fraction produces the poison ivy type lesions, for it belongs to the same plant family as the poison ivy plant. The dermatitis appears whether the workers are in contact with the varnish in the liquid or dry state.⁵

Chlorinated Chemical Compounds: Chloracne is a term frequently used to describe an occupational dermatitis that closely resembles acne vulgaris. This skin disease is generally seen on the face, neck and extensor surfaces of the arms and is caused by contact with various synthetic waxes used in insulating electrical wires, transformers and condensers. These waxes are heat resistant, flameproof, and waterproof, and therefore are ideal for covering electrical material needed by our armed forces. Chemically the wax may be either one or several of the following chlorinated chemical compounds—hence the name chloracne—chloronaphthalenes, chlorodiphenyls, solid chlorobenzols or solid chlorophenols.⁶

Modern insoluble cutting oils are now chlorinated in order to increase their longevity. Thus workers are apt to develop chloracne from contact with such oils.⁷ The acne lesions are due to the deposition of these chloro compounds as fine particles or condensates on the skin. The comedones are formed by the mechanical plugging of the orifices of the pores by the wax, and by the keratinization of the skin.^{6, 7}

Synthetic Resin Glues: These glues are essentially liquid or paste plastics that contain urea or phenol formaldehyde. As such these glues will both irritate and sensitize the skin.⁸ Such glues are used extensively in the manufacture of plywood for airplanes and in the manufacture of wood substitutes such as

laminated asbestos, paper and fabrics. Through this extensive use the incidence of dermatitis due to this glue has increased tremendously.⁹

While on the subject of synthetic resin glues it is pertinent to point out that certain nail polishes contain a liquid resin that is capable of producing a contact dermatitis of the face.¹⁰ The dermatitis generally occurs behind the ears, around the eyes, or around the angle of the mandible. These thin-skinned sites correspond to face areas that are frequently touched by the hand. Thus, suspect fingernail polish as the cause of an obscure dermatitis of the face. The toluene sulfonamide formaldehyde resin is usually the chief cause of nail polish dermatitis.¹¹

Carrots: With the increased use of carrots in the preparation of canned rations, it was found that various canning plants were handling huge tonnages of carrots and consequently workers sustained a prolonged intimate contact with carrots and carrot juice. This contact soon produced an allergic dermatitis.¹² On patch testing it was shown that the allergen is found in the raw carrot, in the carrot juice and in the heated or cooked carrot. The alkalies used in the washing of the carrot were found to play no major role in producing the dermatitis due to carrots. This type of dermatitis has been reported in this country, England¹³ and Australia.¹⁴

Cement-Coated Nails: Various plants have had an outbreak of dermatitis in the shipping department where the workers crated goods in wooden boxes by use of "cement-coated nails." These nails are a substitute for the commonly used galvanized nail that is no longer obtainable due to tin and zinc shortages. Chemical analysis of the coated nails shows the coating to be a rosin. Thus the workers are developing a contact dermatitis due to their sensitivity to rosin. Ester gums (such as rosin) have previously produced dermatitis when used in fabric finishes¹⁵ and adhesive plasters.¹⁶

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Siderosis of Welding: Since 1935 Sander¹⁷ has been particularly interested

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in the lung changes of welders as seen on chest x-rays; namely, discrete nodular shadows uniformly distributed throughout both lungs. These changes somewhat resembled classical silicosis. Histological sections of these nodules showed them to be iron pigment deposits in the lymphatics surrounding the blood vessels. It was concluded that these iron deposits were responsible for the x-ray shadows—hence the term siderosis of welders.

It must be emphasized that the iron deposits had resulted from exposure to iron oxides in very confined spaces such as gasoline and milk tanks. Sander is of the opinion that welding in the open does not produce such changes.¹⁸

The siderosis produced is an inert reaction, without fibrous tissue proliferation and without progressive changes after exposure is decreased.

Cadmium: Because cadmium has been found to produce an excellent rust-resisting coating on metals, more and more materials are being cadmium plated. Thus we may expect to see more cases of cadmium poisoning for this is one of the most toxic of metals. When cadmium-plated ware is welded, heated or burned, cadmium oxide is given off as a yellowish brown fume. Inhalation of this oxide will produce few immediate symptoms, but within four to eight hours the patient will complain of irritation of the throat, headache, and cough. Some 20 to 36 hours after exposure the patient will have symptoms of a pulmonary edema; namely, shortness of breath, pain in the chest, and a persistent cough. If the pulmonary edema develops, 15 percent of the cases may die. Death usually occurs between the seventh and eleventh day after exposure.¹⁹ Recovery seems to be complete in cases that survive.

Cotton Sickness: With the increased demand for the better grades of cotton by the armed forces, lower grades of dirty, bolly, dusty and stained cotton are being offered the various cotton mills that make cotton socks and articles of that type. When this dirty, low grade cotton is processed it usually produces a chain of events known as cotton sick-

ness.²⁰ The disease is characterized by irritation of the nose and throat, coughing, shortness of breath due to a sense of constriction about the chest, weakness and headache. Approximately eight hours after exposure some workers develop chills and fever with temperatures ranging to 104°. Sweating is profuse during the night. By morning they are usually symptom free and upon being re-exposed undergo a similar cycle next day.

On bacteriological analysis of this type of cotton, Neal²¹ found it to be contaminated with a bacterium that produced an exotoxin capable of producing the chain of events previously described. Clinical manifestations of the disease were reproduced in human beings by injecting filtrates of the organism described by Neal.

It is entirely possible that this organism is the causative agent of the so-called Monday fever, gin fever, or mill fever²² previously described in the literature.

Selenium Poisoning: Selenium is a rare metal but, even so, sufficient quantities are available to make it commercially useful.²³ Selenium is used in the manufacture of photoelectric cells, in glass decolorization, in various metallic alloys and in some plating processes. According to Lemley²⁴, selenium poisoning is characterized by slight, continual dizziness, lassitude, impaired powers of concentration, and a perpetually worn-out feeling. In addition to the above symptoms one finds urinary concentration of selenium above 100 parts per billion.

Within the past year we have had the opportunity to study three patients exposed to selenium fumes. The symptoms described by Lemley were present in this group; however, urinary selenium levels did not exceed 100 parts per billion. Our urinary levels ranged from 9.8 to 75 parts per billion. These workers had a definite exposure to selenium fumes for they were volatilizing metallic selenium as a pilot plant process in the development of a new use for selenium on a government contract.

Tellurium: Tellurium is another rare metal not previously used in industry, but with present-day demands for iron and steel that can withstand the rigors

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of a battlefield, tellurium has come into industry. Metallurgists have found that to produce a cast iron surface that is resistant to abrasion and is hard wearing it was necessary to chill the casting. The greater the depth of chill the greater the wearing qualities of the casting. By experimentation it was found that very minute traces of tellurium in the iron produced a greater depth of chill. Consequently tellurized castings are being used as railroad and army tank wheels.

When tellurium is added to the molten

iron, most of the tellurium volatilizes and is inhaled by the workers. In the body the inhaled tellurium is transformed to methyl telluride, a compound that has a very obnoxious garlic smell. Thus within a relatively short time these workers became social outcasts because of their objectionable odor.²⁰ As far as is known tellurium produces no other undesirable changes in the body. Gettler²⁵ calls attention to the fact that one gram of ingested tellurium would cause death in the average human.

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The Pre-Employment Physical Examination

BY IRENE A. LUSSIER, R.N.

THE general adoption of the pre-employment or "entrance" examination dates back to the rather sudden and widespread enactment of workmen's compensation laws just prior to the first World War. Before that period, such examinations were the rule in only about two dozen industrial establishments, although it is recorded that one plant was using them as long ago as 1888. In those early days the employee's rights and the employer's defenses were principally common law. When an injured employee brought suit, his employer defended on an "assumed risk" or "fellow-servant" basis. Apparently, however, there were enough recoveries by employees against their employers to justify some form of prehiring examination which could be used to prevent certain applicants from becoming employees. Since the usual basis of lawsuits was accidents, such an examination, if aimed at the prevention of accidents, would also have its points as a preventive of lawsuits. The announced purpose, therefore, was to exclude those applicants who, for physical reasons, might become a menace to themselves, or to others, or to company property.

Thus the pre-employment examination in industry may be said to have originated from considerations of legal defense, rather than from any early appreciation of the better uses to which it has since been put. But it is easy to see that it could not be confined to that purpose very long. It would exclude some applicants, indeed, but this exclusion left wide-open the implication that those whom it did not exclude would not become

"menaces." The accident records, however, soon disposed of that implication. The heavy artillery of workmen's compensation laws was then brought to bear on the accident problem, and the rapid and country-wide adoption of compensation speedily developed the practice of insuring the compensation liabilities. This in turn caused an almost general adoption of some form of pre-employment study of the prospective worker, and some tightening up in the form and details of that study. The insurance companies, as a matter of good business, wanted to know as much as possible about those whose likelihood of becoming compensation cases they were insuring against. The pre-employment examination was the best means at hand through which to evaluate the risk, and so they saw to it that this examination in one form or another was pretty generally adopted. Thus passed the period of what might be called the *quantity* development of pre-employment examination.

MEANWHILE, they also had been developing along quality lines. There is proof of this in the fact that even in the early 1920's more than five hundred manufacturing plants, of which 80 percent had better than five hundred employees, and 60 percent over a thousand, were requiring all their applicants for work to submit to it. They had begun to sense its many and valuable possibilities in prevention—not only with regard to accidents, but also in relation to medical matters. Their concept of its purposes was the beginning of what we now refer to as "industrial health." They were broadening its uses beyond the selection of applicants with minimum risk to themselves, their fellow employees, and their employer, to include the placement

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PRE-EMPLOYMENT EXAMINATION

of those applicants under conditions that would have the least harmful effects on their health and earning power. The applicants, however, were still "selected."

The status of the pre-employment examination remained on about this level of usefulness until the middle 1930's, when a number of industrial physicians began to avail themselves of its case-finding possibilities. This development came at about the height of the illogical and unfounded suspicions on the part of general practitioners that industrial physicians were competing with them on an unfair basis. But the industrial physicians began to increase the scope of their pre-employment examinations, so as to include laboratory tests for latent conditions which might affect the status of the applicant as a steady and satisfactory worker; and the private practitioners began to receive a lot of cases for treatment which, unless the pre-employment examinations had been made, they would never have known about. Thus, in one rather small midwestern city alone, among 10,000 employees, an industrial physician discovered 400 cases of syphilis which needed treatment and were referred to the private practitioners of that city, with a guaranteed minimum of 25 dollars per case for the treatment required. Instances of this kind had a great deal to do with the recognition by the medical profession in general that industrial medicine was a lot more than minor surgery, and that they could advance their own interests better by recognition of its place and value than by ignoring it.

The broad acknowledgement of industrial medicine as an essential and accepted specialty of medical practice soon followed. And by the time the United States was ready to get into the defense program, in the months ahead of Pearl Harbor, industrial medicine had reached the professional status to which it had long been entitled; and the pre-employment examination had assumed great importance—being generally recognized for its original purpose as well as for its case-finding possibilities—particularly in relation to the early discovery of communicable diseases.

THEN came the defense program and Selective Service. And the third important value of this form of examination began to be generally appreciated when the effects of these became evident simultaneously in the manpower situation. Practically overnight there was such an increase in the need for workers coincident with a reduction in the number from which they could be drawn, as to change the purpose of this form of examination almost entirely from pre-employment to pre-placement. And following Pearl Harbor, when production for defense became smothered under production for war, the screening or exclusion idea was almost completely superseded by the necessity of examining every applicant for the purpose of putting him into a situation where he could do something, however little, in the war effort.

This sudden transformation from pre-employment to pre-placement is well described in the words of an industrial physician as follows:

In 1941 the primary consideration of our company was to get our new plant in production and turn out ammunition. Tens of thousands of people must be hired and trained for quantity and quality production, and time was of the essence. For this great enterprise only the physically fit and mentally alert were desirable. Such people were readily available the first year. The medical department was able to live up to its high standards in selecting only the best of an ample labor supply. Indeed the need for production in the latter part of 1941 was so great that we had no time to prepare sub-standard individuals for jobs. These had to be filled at once, and by people who were able to do them. This condition was nationwide, but medical departments were still able to cut through the manpower supply with no regard for the fact that it was not inexhaustible. In 1942, however, we had to make concessions, and take on certain applicants with qualifications as to medical department supervision while they worked. And 1943 found us with increasing demands for more production, and then more personnel. But the "cream-of-the-crop" were no longer available. Many were already in war work; others were engaged in the bloody business on the battle fronts. And thus we had to revise our standards, so as to employ people who, although they did have physical defects, were still able to give industry eight hours a day of production work. We de-

cided that in our pre-employment physical examinations we would consider not so much the individual's anatomic or static defects as his potential capacity to function safely and effectively on the job. His capacity in this respect would depend, of course, on his being put in a job commensurate with his physical ability. In this manner the Placement Unit was born.

Another industrial physician, in a plant where women are extensively employed, sums it up this way:

In pre-employment examinations today we have not completed the job when we decide if a woman is physically fit. The real problem is, "Fit for what?" We have learned that there is a job for every woman. But not every woman is fit for every job.

And thus the pre-employment examination of the present time has become almost entirely a pre-placement examination. Where it used to be a selective process as to those who were the most healthy from among all applicants, it now has developed to where two of its principal purposes are: first, the rejection of those physically unfit to do any work, and, second, the proper placement of those with limited physical ability. These are very important developments. Significant, indeed, are the words, "unfit to do any work." Even more significant is the fact that these words, with the emphasis on the "any," mean exactly what they say. Anybody who can do anything can safely submit himself to the modern pre-employment examination with the fullest assurance that this examination will not be applied to him for any purpose of selecting him as a worker or non-worker, but only for selecting—in the light of what the examination discloses regarding him—the kind of work he can do. Of course, it may be said that this complete development of the pre-employment examination into its modern pre-placement form was caused by the war. But regardless of that, it will be with us for a long time to come, in view of the tremendous problem of employing those who must return from participation in the war with physical impairments and disabilities too terrible to contemplate but who, nevertheless, will have to readjust to civilian life. The pre-employment examination will be the critical element in this readjustment.

It is interesting to note, however, that the change-over from pre-employment to pre-placement, although it seems to have been practically finished in sudden and summary fashion, began many years ago. The first industrial physician who marked a pre-employment examination report with the suggestion that the applicant, being light-weight, small-boned, frail, and of the "mental type," should not be put on heavy work, or who, perhaps, refused to approve a man with hernia for a weight-lifting job, all unwittingly started it. And industrial physicians have been contributing to it and urging it more and more throughout the years.

UNDERRYING these two major developments of the pre-employment examination, other uses to which it could be very profitably applied have also been coming to light. Even before the war there was a notable movement in the direction of the statistical analysis of large numbers of these examinations for the purpose of grouping their common factors and isolating their uncommon factors. Some companies have even developed the practice of transcribing the examination data in code on punch cards so that the statistics can be developed en masse. One purpose of this is the quick coordination of individual capacities to individual job requirements, the latter also being coded for quick tabulation on punch cards.

But certain revelations from the various common denominators of these examination statistics led to the thought that the pre-employment or pre-placement examination might, indeed, become not only the "keystone of industrial medicine," as Dr. Sappington calls it, but also the keystone of preventive medicine in industry. For example, a number of the individual records made at a previous time and analyzed today reveal certain beginning tendencies toward abnormal or disease conditions then present in the persons examined. These persons can now be re-examined to see whether or not any tendency has developed into an actual condition. This kind of study, over a period of years, will obviously furnish a basis for projection into the future. Thus,

if a deviation from normal in a certain respect five years ago were to show that it was having a certain result now, then it could be anticipated, at least, that a similar deviation now could have a similar result five years hence. And that result five or ten years hence might be aborted if prevention were to begin now. In other words this would reduce the over-all catch-phrase of "preventive medicine in industry" from general to personal and specific terms by discovering the something that could be prevented. This was a startling development when it was first broached, and it has gripped the imaginations of a great many industrial physicians. One of the first of these to publish his experiences and conclusions regarding it was Dr. William J. Fulton, of Eastern Aircraft, in Baltimore. His article in the January 1944 issue of *Industrial Medicine*, "Records—The 'Seeing Eye' of Industrial Medicine," is remarkable for the breadth of his conception of the possibilities of this idea. He even went so far as to intimate that a careful analytical study of the physical data regarding any considerable group of employees—such as are the largest groups in a good many communities—beginning with a proper pre-employment or pre-placement study and continuing on a basis of following up the things disclosed in such a study, can predict a coming epidemic.

Dr. Fred J. Wampler, author of *The Principles and Practice of Industrial Medicine*,* has said: "The industrial physician has the opportunity to invent and test out new techniques for discerning deviations from the normal in man often long before the man himself is aware of trouble." And he referred to the very fine work that Dr. Foulger, of Haskell Laboratories, has already accomplished in his study of blood pressure variations as a basis of what might be called "preventive diagnosis."

For obvious reasons, the beginning point of all such investigations in indus-

trial medicine must be the pre-employment examination.

And thus we come to the fourth value of the present-day pre-placement examination. This fourth value is obtained from its fourth purpose, which is the recording of all physical defects or disabilities.

This is the one respect in which the original form of the pre-employment examination may be said to have survived. For the discovery of physical defects or disabilities was the reason for the examination when it was first inaugurated. In the early days, however, examination findings were not very carefully made. The applicant was hired or not hired, and that was usually the end of it. Compensation insurance brought some detail into the records, and a more or less desultory permanence into their preservation. This was necessary from the medicolegal standpoint. But it was the discovery of their potential statistical value that drew real attention to detail in the making, and permanence in the keeping, of pre-employment examination records. Nowadays, in practically every important medical department in the country, these records of all physical defects or disabilities are made with great care, and carefully filed. This is highly important for all three reasons of placement, statistics, and medicolegal possibilities.

Now as to the form of the pre-placement examination. The first form that was generally adopted in this respect was evolved in the early 1920's by the Conference Board of Physicians in Industry, in New England. A good many industrial physicians have added various details, from time to time, conformable to the requirements of their special situations. And some have revised the form entirely, for specific application. That original Conference Board form, however, may be said to be still the basis of most of the forms now in use. But there is this difference, that whereas that form, and its subsequent and numerous modifications were largely designed for selective purposes, the present forms are being

*Wampler, Fred J. *Principles and Practice of Industrial Medicine*. Williams and Wilkins Company, Baltimore, 1943.

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adapted to the modern purposes of the pre-placement examination—namely, the discovery of the applicant's ability to do any work, and the full, detailed, and intelligent recording of all physical defects the applicant may have, including all deviations from the normal.

Surprisingly enough, the tendency is toward shortening the form, rather than lengthening it. A good example of a short but entirely suitable form will be found in the article by Dr. Fulton previously mentioned.

Now what does all this mean to the industrial nurse?

Every industrial nurse knows *how* the pre-employment physical examination is made.

But not every industrial nurse knows *why* it is made, and the important purposes to which the information it produces can be applied.

I have, therefore, briefly outlined the facts:

The pre-employment examination has become, and is very likely to remain, the pre-placement examination.

Regardless of what it used to be, its purposes now are:

To select those who are able to do any kind of work from those who are not capable of even that, and to place those who can work in the kind of work they can do by facilitating the proper coordination of the capacities of the applicant with the requirements of the job.

To make and preserve careful and detailed records of all physical conditions found, in order that these records may be available and understandable at a future time in connection with subsequent examinations, statistical studies, the occurrences of illness and injury, and possible medicolegal developments.

With some appreciation of these significances in her mind, together with a little imagination, the industrial nurse will discover that every time she assists her doctor in making a pre-placement examination she is helping immeasurably to broaden and strengthen the foundation on which her doctor and his colleagues are building the firm and enduring structure of preventive medicine in industry.

NURSE PLACEMENT SERVICE

NPS announces the following placements and assisted placements from among appointments made in various fields of public health nursing. As is our custom consent to publish these has been secured in each case from both nurse and employer.

PLACEMENTS

- *Amelia M. Meyersiek, B.S., public health nursing consultant, State Society for Crippled Children, St. Louis, Mo.
- *Mariana H. Ward, B.S., deputy director of nursing service, American Red Cross, Eastern Area, Alexandria, Va.
- *F. Eleanor Strause, B.S., director-supervisor, Community Nursing Service of Johnstown, Inc., Johnstown, Pa.
- *Freda K. Parks, B.S., general supervisor and maternity consultant nurse, Public Health Nursing Association, Indianapolis, Ind.
- Jean Kass, B.S., staff nurse, City Health Department, Oakland, Calif.

Florence S. Walty, industrial nurse, Union Special Machine Company, Chicago, Ill.

ASSISTED PLACEMENTS

- *Kathleen M. Leahy, A.B., M.S., assistant to director (in charge of program of nurses released from the army and navy) American Red Cross, Washington, D.C.
- *Frances L. Porter, B.S., advisory nurse, State Board of Health, Madison, Wis.
- *Barbara Dunfield, B.S. public health nurse, promoted to public health nursing consultant, Connecticut State Department of Health, Hartford, Conn.
- *Mrs. Dolores G. Wininger, public health nurse, Department of Public Health, San Francisco, Calif.
- Suzanne E. Wittmer, staff nurse, Visiting Nurse Association, Brooklyn, N. Y.
- Helen C. Shannon, B.A., junior public health nurse, Wichita Health Unit, Wichita Falls, Tex.

*The NOPHN files show this nurse is a member.

The Returned Serviceman in Industry

THE INDUSTRIAL nurse enters this picture after the returned serviceman has offered himself for work in industry. The part which the nurse plays in helping the employee re-orient himself is governed by the policy of the company, by the procedures of the medical department outlined by the doctor, and by knowledge the nurse can bring to her job.

There are three angles then from which the nurse can approach the problem:

First, she acquaints herself with the plans of her company for rehabilitation of the returnees—some companies like Caterpillar Tractor, International Harvester, and General Motors are now working on concrete plans for pre-placement training. These take into consideration the training the men have received since they have been in the services. In many cases the employees rate better jobs than they had before the war.

Second, the industrial physicians and surgeons are giving a great deal of thought to this new phase of their work and have or will have procedures for the guidance of the nurse.

Third, the nurse has at her command articles, lectures, meetings, and materials which should be utilized to augment and bring up to date her knowledge of psychiatry. She should not wait until she has to use this information but should get it now. Also, she can find out what community resources are at her command. These may be community clinics, veterans' rehabilitation centers, American Red Cross clinics or others set up for the sole purpose of helping the returned servicemen. A visit by the nurse to such centers will do something to enlighten her on what is being done and can be done.

Since Pearl Harbor, over a million and a quarter men have been discharged from the Army, Navy, Marine Corps and Coast Guard. These discharged war veterans and ex-trainees have made up in part the

new industrial manpower entering the labor market at a rate of 70,000 a month. The war is over for these men, and the problem of rehabilitation is with us now. Let us prepare ourselves to meet it adequately as we have so many others.

Fortified by a sound knowledge of the basic causes and the ways to meet them, the nurse then turns a smiling face to the returned employee. She avoids all reference to the man's war experiences but takes the attitude that she welcomes him back home and back to work. By her whole bearing she reassures him that the company is glad he is again at work. Her genuine interest and consideration—not coddling—will have one of the finest effects on his mental outlook. If he is treated normally, he will react normally. Emphasis should be directed to his abilities, not his disabilities, at what he has, not what he has lost.

A visit to his home may be made to educate the family as to what they can do to help their returned breadwinner. The wife may be referred to the American Red Cross for education on behavior and attitudes that will help her readjust herself to her husband, just returned from the service of his country.

There may be occasions when the nurse may be required to draw on her own resources to encourage the man. At times like that she could quote examples such as President Roosevelt or Steinmetz, both men who overcame great handicaps by determination and will power. They made their disability an asset, not a liability.

The nurse then is in a strategic position to help re-orient the returnee, by her knowledge, understanding and interest applied in a way that only she is privileged to share. She must not fail.

JANE S. WEIR, R.N.
NATIONAL SAFETY COUNCIL
CHICAGO, ILLINOIS

Annual Board Meeting

THE ANNUAL meetings of the NOPHN Board of Directors were held in New York City January 26 and 27. They occurred in the tense atmosphere which followed the President's message urging amendment to the Selective Training and Service Act to provide for inducting of nurses into the armed forces. This and other matters related to the serious times in which we are living made the meetings of unusual interest and importance.

For this reason it was especially unfortunate that travel conditions due to storms in the Northeast and congestion caused by the war made it impossible for all members to attend. Of those who did come several arrived very late, their trains having been held up for hours a few miles from New York. In spite of difficulties, however, a representative group of twenty members from all parts of the United States was present.

The Board meeting on January 26 opened with remarks by Marion Sheahan, president. She listed public health nursing's immediate problems and future opportunities. Both problems and opportunities, Miss Sheahan said, bring new responsibilities to the NOPHN. Her talk, in addition to a later report by Alma Haupt on the three weeks she spent at Washington as representative of the National Nursing Council for War Service, focussed the thoughts of the Board on the proposed draft of nurses. As a result, the Board passed a resolution which endorsed in principle amendment of the Selective Training and Service Act to include registration and selection of all women should this be necessary. The resolution also pointed out the very large number of nurses who have volunteered for the military but recognized that immediate, special action with regard to nurses might be necessary because of the Army and Navy's urgent need, and finally urged maintenance of minimum essential public health nursing service through use of the classification of nurses as set forth by the

Procurement and Assignment Service of the War Manpower Commission. This resolution was printed on page 60 of the February PUBLIC HEALTH NURSING.

The treasurer's report, accepted and approved, appears on page 166 of this issue.

The general director's report pointed out the following public health nursing highlights of 1944:

Postwar Planning. Despite intensification of wartime activities and difficulties, the nursing profession like other groups has been considering postwar plans. Each national nursing organization has a committee for this purpose and together they have formed a "National Nursing Planning Committee," which is at present attached to the National Nursing Council for War Service. Plans already have been approved by the Council Committee for development of a commission to undertake an impartial analysis of the organization, administration, financial support and control of nursing education. A bureau to handle accreditation matters is also proposed. This is a project long favored by the NOPHN.

Study of National Nursing Organizations. The Joint Boards voted in January 1944 to make a study of national nursing organizations in order to assure efficient machinery for carrying out postwar plans. Amelia H. Grant has recently been appointed to develop a plan for this study.

Expansion of Health Insurance Plans. At the Biennial Nursing Convention in Buffalo, New York, in June 1944, the NOPHN Board of Directors passed a resolution favoring expansion of prepayment health insurance plans:

"Resolved that the NOPHN favor the expansion of prepayment health insurance plans with provision for nursing service, including nursing care in the home. It believes that, in addition to voluntary effort, governmental assistance is necessary for attaining adequate distribution of health services."

This action was presented to and approved also by the Joint Boards of the three national nursing organizations.

American War-Community Services Project. NOPHN's share of money for this project for the development of public health nursing care of the sick services in war communities in 1944 was \$16,500. Despite limited funds, results have been worth while. They have shown the value of intensive field service from NOPHN to communities needing help in expanding public health nursing programs. Twenty war com-

BOARD MEETING

munities have been visited, some of them several times. New public health nursing services for the care of the sick are functioning in two southern communities. Services in five additional communities are pending. Three of these expect to start immediately. Three existing services struggling with difficult war-created conditions have been strengthened and advisory service given to a fourth. Nine other exploratory visits have been made which included brief surveys of community situations.

Community Public Health Nursing Studies. Studies of public health nursing in ten communities were completed in 1944. Probably due to war pressures and changing conditions, requests for this type of service have increased in 1944. Only limitations of staff prevent further expansion.

Educational Activities. The NOPHN in cooperation with the National League of Nursing Education accredited the program of a basic professional school of nursing which prepares its students on graduation for staff level positions in public health agencies offering direct supervision. This is the Skidmore College School of Nursing.

The program of study at the University of Hawaii was again placed on the accredited list. This program had been temporarily discontinued because of war conditions.

The Education Committee of NOPHN worked with the League Committee on Measurement and Educational Guidance in the revision of the test of basic nursing information and judgment to be used by universities and public health nursing agencies and by civil service commissions for placement and guidance.

There has also been study of advanced preparation of public health nurses in special fields such as industrial nursing, mental hygiene, orthopedics, and tuberculosis.

Tuberculosis Nurse Consultant. A gift from the National Tuberculosis Association made possible the appointment of a tuberculosis consultant. This was especially timely in view of the probable wartime increase in tuberculosis, the finding of many new cases through mass x-raying of men examined for military service and of industrial groups, and the establishment of the new Tuberculosis Control Division of the U. S. Public Health Service.

Orthopedic Nursing. With the growth and spread of the poliomyelitis epidemic during the summer and fall of 1944 the Orthopedic Nursing Service met many demands. Informational material was sent to nurses in epidemic areas and instructors of Red Cross nurse's aide classes. The Guide for Nurses and Parents prepared for the National Foundation for Infantile Paralysis was widely distributed. Assistance was given to the Foundation in obtaining personnel—both nursing and physical therapy. Scholarships to

prepare orthopedic nurses, 1940-1944, have been awarded to 33 students.

School Nursing. The Executive Committee of the School Nursing Section met in January with Louise Baker of the Procurement and Assignment Service; a meeting was held on "The Changing School Health Program" at the Biennial Nursing Convention; and a special school nursing issue of the magazine was published in September. The National Conference for Cooperation in Health Education, which is studying functions of school health personnel, has used some of the material developed by a committee of the NOPHN School Nursing Section headed by Dr. Dorothy Nyswander. A committee of the School Nursing Section composed of a central committee and 39 state committees of nurses engaged in school health work is working on standards of supervision for school nursing.

Industrial Nursing. A preconvention institute was conducted on eye health at the time of the American Public Health Association meeting, October 1-2, 1944. A joint committee has been formed with the American Association of Industrial Nurses to consider the problems of industrial nursing.

New Section and Committee. A section was formed for nurse-midwives employed in public health nursing agencies. The Advisory Committee on Vocational Counseling has become active to meet the expected postwar problems of guidance and placement of public health nurses.

Public Health Nursing Day. A new undertaking, promotion of Public Health Nursing Day, January 26, 1945, was launched with the slogan, "Know Your Public Health Nurse—Who She Is, What She Does." This is a project of the Board and Committee Members Section. The idea received enthusiastic response throughout the country and many excellent programs resulted.

Membership and Contributions. In general, NOPHN memberships and contributions increased during 1944. As of December 31, NOPHN had received a total of \$34,089.32 in agency dues from 348 member agencies. This represents an increase in agency dues of \$3,057.43 over 1943. There is every indication of further substantial increases in 1945. A special letter was sent in June to all agency members not already paying full one percent dues. This letter requested them to consider 1945 increases. Many agencies replied that these increases had been voted for 1945—one agency voting an increase of \$500, and another an increase of \$250.

Individual membership gained in numbers but this gain came only in general members, NOPHN having 112 more general members than in 1943. Nurse membership actually decreased—10,247 in 1944 as compared with 10,324 in 1943. If 1944 had been a normal year, nurse membership would probably have seen a substantial gain. So far as

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NOPHN has been notified, 506 nurse members are in military service. Of these 83 are overseas and receiving complimentary membership; 350 cancelled membership "for the duration"; 20 paid dues for 1944; and 53 failed to notify us. It is estimated that at least 500 additional former NOPHN nurse members are in military service but have failed to notify us. Individual memberships as of December 31 totalled 11,080.

Individual contributions were as follows: 210 contributors, \$18,128.50. This compares favorably with 1943 contributions of \$17,532.10 from 188 contributors. The 1944 figure includes the nine contributors to Public Health Nursing Day.

Following the General Director's report, the report of the NOPHN Planning Committee was thoroughly discussed and approved. It represents, as Miss Sheahan pointed out, a "Five Year Plan" for NOPHN, enlarging all its present activities and adding new ones. This report has been presented to the National Nursing Planning Committee of the National Nursing Council for War Service with estimates of cost. The National Nursing Planning Committee hopes to secure from foundations some of the funds needed to put these plans into effect.

Other action taken by the Board included:

Approval of a commission to study nursing education

Approval in principle of the plan for a single national body to accreditate nursing education programs

Approval of continuing the NOPHN-AWCS project for development of care of the sick services in war industry communities with recognition of limitations in the program caused by nurse shortages and limited funds

Approval of a communication to be sent to the Office of Vocational Rehabilitation in Washington incorporating the following:

Inasmuch as the "Manual of Policies" relating to "Requirements and Recommendations for Physical Restoration Services" issued by the Office of Vocational Rehabilitation as of April 1, 1944 refers to the use of local public health nursing services in vocational rehabilitation programs, and inasmuch as many questions are arising among agency and individual

members of the NOPHN as to how these services are to be mobilized and administered for their most effective utilization, the Board of Directors of the NOPHN at their annual meeting on January 26, 1945 submits the following recommendations:

1. That, in addition to public health nursing representation on the professional advisory committee to the Federal Office of Vocational Rehabilitation, provision be made for a public health nursing consultant on the staff of the federal agency during the planning and policymaking as well as the execution stages of the program. This consultant might well be secured on loan from another government agency such as the United States Public Health Service.

2. That, in addition to public health nurse membership on the state advisory committees, the same type of provision for a public health nursing consultant be made in the state vocational rehabilitation agencies. This worker, too, might be secured part-time from another state agency such as the state health department.

Approval of appointment of a committee to consider the possibility of establishing a national uniform or insignia for public health nurses as soon as wartime or peacetime conditions permit.

Agreement that there is need for special guidance and counseling for Negro nurses, that it would best be given through the employment of a Negro nurse in any counseling and guidance program, and that this recommendation be made to the American Nurses' Association.

Agreement, since the majority of a group of NOPHN member agencies when questioned reported their desire to use Red Cross nurse's aides after the war, that there is need for nurse's aides in public health nursing agencies both for the war period and in peacetime.

Approval of appointment of a small committee to canvass NOPHN member agencies concerning the desirability of future preparation and experience for Red Cross nurse's aides.

RUTH HOULTON, R.N., SECRETARY
NOPHN BOARD OF DIRECTORS

Report of Meeting of NOPHN Council of Branches

January 25, 1945

In WELCOMING the delegates, Ruth Houlton pointed out that in spite of current transportation difficulties delegates were present from 18 of the 21 SOPHN's. She told the group that never before had the NOPHN needed their counsel for public health nursing as much as in these critical times and that she hoped the NOPHN might give the group helpful information to take back with them.

Mathilda Scheuer, president of the Pennsylvania Organization for Public Health Nursing, led the discussion of "Meeting Personnel Needs in Public Health Nursing" from the angles of recruitment, placement and guidance, and supplementing professional services. She reported that in Pennsylvania the SOPHN as well as the SNA has helped with recruitment of student nurses by giving talks to high school students. She felt that the SOPHN should share in the responsibility for vocational counseling. Considerable discussion followed about the senior cadet in the field of public health nursing, and recent directives of the United States Public Health Service which make recruiting of cadets for public health nursing rather uncertain. Even though senior cadets may be classified as available for military service (I-A) by their procurement and assignment committees and go into military service on completion of training, it was the consensus that they would be very helpful in public health nursing agencies for the 6-month supervised practice period.

The Pennsylvania SNA, reported Miss Scheuer, is considering development of regional placement and counseling offices. The SOPHN hopes they will be asked to participate along with the SNA in any placement program in Pennsylvania. Counseling and guidance is done now in voluntary agencies to help young women who come to agency offices with no definite job in mind. The executive secretary of the Philadelphia Nursing Council

has done a lot of work with some of the veteran nurses with medical discharges. Miss Scheuer felt that the SOPHN should act as a department for all public health nursing placement and guidance matters.

In the group discussion following, many illustrations were given of staff disruption all over the country. Everyone agreed that military needs must be met, yet the need for holding the line to maintain essential public health nursing services for civilians was also stressed. (See Dr. E. S. Godfrey's statement February PUBLIC HEALTH NURSING, p. 59.) How many nurses can a community lose without doing damage to the community? The group realized that much more can be done to make sure that every public health nurse is doing essential work. There are still communities where health departments, VNA's, boards of education, other agencies employing public health nurses are working with little or no effort to correlate their services, pool their resources—thus wasting nurse power. The group agreed that professional services could be supplemented to a much greater extent by means of clerical assistance, auxiliary workers, and volunteers. The Community Health Service in Minneapolis has a very satisfactory volunteer program. A former volunteer is now employed part time to recruit and train volunteers. The New Jersey and Wisconsin SOPHN lay sections have worked out programs and manuals for the use of volunteers in their respective states. Many agencies are calling upon the nurse's aide director of the local Red Cross chapter to see if nurse's aides can be spared from hospitals, with the result that these trained volunteers are giving needed help in public health nursing services. It was suggested that SOPHN's sponsor more lay volunteer programs in order to secure assistance for nurses working alone who have little time to recruit and train volunteers. Miss Houlton pointed out

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that probably the number of well qualified public health nurses will always be limited but that a great deal of agency work can be done by others such as graduate nurses without public health nursing preparation, practical nurses, and volunteers; and that in order to control the situation it is important to have all who nurse for hire licensed. It is necessary also, Miss Houlton added, to find out as soon as possible how many practical nurses can be wisely used in relation to the number of graduate nurses. A study is being planned toward this end.

Dorothy Rusby of the NOPHN staff reviewed briefly the present situation regarding "Personnel Practices." There has been a trend toward higher salaries and longer working hours. Factors effecting these changes are supply and demand, trend toward higher salaries in other branches of nursing, greater weight given to experience and preparation. Methods used to increase salaries have included (1) basic salary increases (2) addition of cost of living bonus to basic salary scale (3) a combination of salary increase and bonus, and (4) payment for extra hours worked on an hourly basis, or time and a half. Greater uniformity in salary scales is needed if public health nurses are to be more equitably distributed in terms of need. Working hours vary, but for many public health nurses the 44-hour week is commonly followed. The California SOPHN, in co-operation with the California State Board of Health, has recently made a study and published recommendations regarding desirable personnel practices. The NOPHN is organizing a Committee on Personnel Practices to study the whole situation.

Miss Rusby discussed "Retirement Plans" for nurses. Prospects for the immediate amendment of the Social Security Law to include workers in health and welfare agencies are not favorable. If and when they are included, the benefits in most cases will be insufficient to satisfy professional workers. Individual pension and annuity plans are available to anyone who can afford them. The Harmon Foundation Plan is not being used

extensively by nurses and needs more promotion for it is a good plan. A national retirement plan for employees of health and welfare agencies has been set up by the Community Chests and Councils and will function under the National Health and Welfare Retirement Association, 441 Lexington Avenue, New York City. This is a non-profit organization, providing an insurance type of plan which will be underwritten by the John Hancock Mutual Life Insurance Company. It provides that employer and employee each pay 5 percent of the employee's monthly salary. The benefits include an income after the worker is 65 years of age or a lump sum payment to the beneficiary if the worker dies before 65. The great advantage of the plan is that a worker may transfer from one agency to another and continue in the plan provided the new agency is a member. For an agency to be eligible to the plan 75 percent of the employees must elect to participate.

At the afternoon session Agnes Fuller of the NOPHN staff, and secretary to the Advisory Committee on Vocational Guidance, reported on the ANA plan for "Professional Counseling and Placement." This provides for a counseling and placement service for all nurses through a central bureau and a limited number of local registries to be selected by SNA's. A full-time qualified public health nurse assigned to the central placement bureau has been proposed. The group discussed the immediate need for counseling among returned veteran nurses and for correct and adequate information at separation centers, veterans' information and referral offices, and local nursing councils. It was the consensus that SOPHN's have an active and important part to play in the vocational program and should think of ways and means whereby they can contribute most usefully.

"School Nursing Trends" were reviewed by Alberta B. Wilson of the NOPHN staff. She reported that there is a noticeable trend in thinking among educators toward a defining of the total health needs of the school child, defining

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the functions of school health personnel to meet the child's needs, and finally toward defining the preparation needed by school health personnel to carry out these functions. This task has been undertaken by the National Conference for Cooperation in Health Education, which is composed of more than 40 national health and education agencies. The Metropolitan Life Insurance Company is financing a study which is considering the school nurse first; school physician and administrator will follow. Recent inquiries have revealed a feeling that there is a need for regional school nursing conferences, and for school nursing sections to be formed in SOPHN's or school nursing committees of public health nursing sections of SNA's. Miss Wilson reported also there is much evidence of integration of the school program with the interests and resources of the community and the use of the school and all its facilities as a practice field. Such a trend indicates the need for closer cooperation between health and education groups at national, state, and local levels.

Ruth Scott, NOPHN industrial nursing consultant, discussed "Trends in Industrial Nursing." Several SOPHN's already have industrial nursing sections and one of the contributions SOPHN's can make is to assist with formation of additional sections in this specialty because industrial nurses feel a need to become affiliated with their own professional group. Through the Joint Committee of the American Association of Industrial Nurses and the NOPHN Industrial Nursing Section, standards for qualifications and preparation of the industrial nurse will be studied. Many industrial nurses are taking public health nursing and industrial nursing courses. The rehabilitation of war veterans, the interest of chamber of commerce and labor groups, the interest of health agencies and industrial management in better industrial health programs all contribute to the need of the industrial nurse for assistance. It was agreed that SOPHN industrial nursing sections and branches of the AAIN need to work closely together and this is being done in some states with

good results. That many industrial nurses are able to leave their plants to attend professional nursing meetings shows that management is understanding the needs of industrial nurses for better preparation and staff education. In some instances management is sponsoring university courses and paying nurses' tuition fees.

Edith Wensley of the NOPHN staff, and secretary to the Board and Committee Members Section, led the discussion on "Public Relations." She stated that SOPHN publicity committees are extremely important and every SOPHN is urged to develop such a committee and include lay membership on the committee. The Minnesota SOPHN publicity committee has played a most effective part in the whole nursing picture. It was the opinion of the group that SOPHN publicity committees would welcome help from the NOPHN, especially suggestions for news releases and general publicity. The names of SOPHN committee chairmen are to be sent to Mrs. Wensley. Everyone agreed that Public Health Nursing Day was extremely worthwhile and should be repeated next year. SOPHN's were asked to send in reports of Public Health Nursing Day programs in their states.

Director of the NOPHN American War-Community Services project, Ruth Fisher, discussed "Expanding Bedside Nursing Services" and NOPHN's interest now as in the past in promoting care of the sick at home. Many communities have been surveyed to determine the needs and resources for the care of the sick at home. The NOPHN has affiliated with five other national agencies to help war communities secure needed social welfare services. NOPHN's part is to help organize services for bedside care for people sick at home. Each community plan is developed to suit the pattern of the community. In some instances the health department assumes responsibility for bedside care in the home; in others a community visiting nurse service is organized; sometimes existing services are combined. The goal of providing adequate nursing service to the community

PUBLIC HEALTH NURSING

with the least personnel is kept in mind. Through SOPHN's, local communities can be surveyed and an overall view obtained of state problems. SOPHN's and state and local nursing councils have a big job to do to get the right kind of nursing care for their communities.

"Public Health Nursing in Rehabilitation Programs" was discussed by Hortense Hilbert, NOPHN associate director. She suggested that each SOPHN secure a copy of *A Public Service for Restoring the Handicapped to Useful Employment*, a manual of the Office of Vocational Rehabilitation, Federal Security Agency. This manual shows that physical restoration is provided from federal-state funds and that the rehabilitation program calls for public health nursing service locally as one of the services to be mobilized for returning disabled civilians and veterans to employment. SOPHN's need to study this subject.

Ruth Houlton, NOPHN general director, discussed "Postwar Plans and Nursing Councils for Peace." Miss Houlton reviewed the past history of nursing councils. As long as twenty years ago there were several nursing councils in this country. In 1934 the national nursing organization formed the Joint Committee on Community Nursing Service for the purpose of stimulating nursing councils. Additional councils were formed. When the war started, the National Nursing Council for War Service began developing local councils for war service; therefore formation of other nursing councils was dropped. There are now hundreds of nursing councils for war service scat-

tered throughout the country. During the past summer, when the end of the war seemed near, NOPHN began to receive many questions about nursing council activities after the war. Since the National Nursing Council for War Service voted to go out of existence six months after the war, the Joint Committee on Community Nursing Services has become active again and will advise on peacetime councils.

"Prepayment Medical Plans" were reviewed by Emilie Sargent, director of the Detroit VNA. Miss Sargent expressed the hope that Blue Cross hospital plan organizations will experiment with the inclusion of nursing in the home. She said that nursing could not develop such a prepayment plan by itself, but must participate in other types of health insurance plans. Any plan adopted should permit the member to select from alternative services—so many hours of professional nursing at home or hospital and the further alternative of practical nursing at home. Demonstrations are needed and it is hoped that local people will be interested in promoting such plans.

The chairman of the Council of Branches, Mrs. Hatton, in summing up the highlights of the day's meeting, called upon all SOPHN groups to be listening posts and reminded them that theirs is the responsibility to find out what problems face their communities and what action must be taken to meet the needs.

Ethel Brooks, Massachusetts, was elected chairman to serve until 1946 and Marie Neuschaefer, Iowa, vice-chairman.

ALBERTA B. WILSON, SECRETARY

Present were: *Mrs. Mildred L. Hatton, chairman, Rhode Island; Christine Causey, vice-chairman, Louisiana.

State Delegates: *Ethel Reeves, Arkansas; Helen Bean, California; *Mrs. Gladys Garland, Georgia; *Marie Neuschaefer, Iowa; *Mrs. Helen C. Curry, Kentucky; *Lucile Woodville, Louisiana; Irene Duffy, Maryland; *Ethel Brooks, Massachusetts; *Mildred Tuttle, Michigan; *Helen Hestad, Minnesota; Aagot Lian, Montana; Nelda Belknap, Nebraska; *Caroline di Donato, New Jersey; Henrietta Doltz, Oregon; *Mathilda Scheuer, Pennsylvania; Mrs. Erma Rawson, Utah; Ann Schmich, Wisconsin.

Guests: Alice Clark, Kentucky; Mrs. Frank Wright, lay member, Massachusetts; Mrs. Arlo Gork, lay member, Michigan; Emilie Sargent, Michigan; Mrs. James Creese, lay member, New Jersey; Mrs. Grace Colson, New Jersey; Mrs. S. Emlen Stokes, lay member, New Jersey; Mrs. William Heitshu, lay member, Pennsylvania; Ruby Wallace, South Carolina.

*President, SOPHN.

Reviews and Book Notes

INDUSTRIAL NUTRITION

By Ludwig Teleky, M.D. 64 pp. Industrial Commentaries, Vol. 2, No. 1. Industrial Commentaries, Chicago, Illinois, 1944. \$2.

A handbook which might be used by personnel interested in the nutrition of industrial workers and which would be applicable to the situation existing in industry today has long been a felt need. Unfortunately, Dr. Teleky's book does not meet this need.

Apparently his book is intended for the use of nonprofessional personnel in industrial cafeterias. The technical material is inadequately interpreted and statements at variance with the findings of nutritional research are frequently made.

For instance, Dr. Teleky states that "a pound of cooked potatoes contains about 10 mg. of ascorbic acid," and adds that although no one in the lower income groups in the northeastern United States obtained a minimum Vitamin C intake during the winter months some decades ago, "scurvy was extremely rare." Actually, one medium baked potato contains about 10 mg. of ascorbic acid and during the potato famine in Maine in 1937 there were demonstrable cases of Vitamin C deficiency. Elsewhere, he states that "a quart of milk alone provides two thirds of the daily minimum need" of ascorbic acid. But in pasteurization approximately 60 percent of the Vitamin C content is destroyed so that pasteurized milk becomes a very poor source of ascorbic acid. And when he recommends milk as "able to make up for all dietary deficiencies" except iron, he has apparently forgotten that milk is a poor source of that very important vitamin, niacin.

Tables are presented in 100 gm. portions rather than in servings so that the inexperienced reader has difficulty in translating them into familiar terms.

Except for the suggestion that a person in the factory canteen who is trained in nutrition — dietitian or cook — should

lecture about good diets to groups of workers, there is no discussion of the channels which might be utilized for the nutrition education of the industrial worker.

The format of the book is attractive, but the material is not scientifically correct nor are suggestions practical.

LUCILLE HARMON, R.N.
Boston, Mass.

SYMPOSIUM ON INDUSTRIAL HEALTH

Edited by C. O. Sappington, M.D., Dr.P.H. *Clinics*, October, 1943. J. B. Lippincott Company, East Washington Square, Philadelphia 5, Pa. 807 pp. \$2.

This series of discussions includes both industrial health problems and the functioning of specific personnel in meeting these problems. Emphasis is placed on the preventive aspects in maintaining good health among workers. The method of having each of various plant personnel (industrial physician, industrial hygiene and safety engineers, and personnel director) write about his particular area of responsibility is not new. Included also are discussions on special health needs in industry such as dental and eye care, nutrition, fatigue, mental hygiene, non-occupational diseases, and others. Each article was contributed by an authority in the field.

Of special value are the articles describing the role of many of the professional and service organizations which are making such splendid contributions to the field of industrial health. The organizations represented are the Council on Industrial Health of the American Medical Association, the American Association of Industrial Physicians and Surgeons, the American Industrial Hygiene Association, the American Association of Industrial Nurses, the U.S. Bureau of Mines, the U.S. Department of Labor, the U.S. Public Health Service and the Industrial Hygiene Foundation. This

PUBLIC HEALTH NURSING

probably is the only instance where a description of the functioning of so many organizations can be found in one publication. For this reason it is particularly helpful to nurses and others who may wish to know more about the role each organization plays. Two organizations not included which are active in the industrial hygiene field are the American Public Health Association and the NOPHN.

R.M.S.

INTRODUCTION TO PUBLIC HEALTH

By Harry S. Mustard, M.D. 283 pp. Macmillan Company, New York, second edition, 1944. \$3.25.

The author, well known as a teacher in the public health field, has here condensed into one volume a vast amount of information on present public health practices. His style is simple, convincing and lucid, certainly one to arrest the attention of the student in a school of nursing. This book might well be used as a reference in a number of the courses in the basic nursing curriculum, such as introduction to medical science; medical and surgical nursing; obstetrical nursing; nursing of children, and nursing and health service in the family. It should help to develop in the student a true concept of the function of the modern professional nurse as one who is "essentially a teacher and an agent of health in whatever field she may be working."

MARY M. RICHARDSON, R.N.
New York, N.Y.

COMMUNICABLE DISEASES

By Nina D. Gage, R.N., and John Fitch Landon, M.D., with the collaboration of Grace M. Longhurst, R.N., and George F. Hoch, M.D. 525 pp. F. A. Davis Company, Philadelphia, fourth edition, 1944. \$3.50.

The fourth edition of *Communicable Diseases* by Gage and Landon is well arranged and clearly worded. It contains a number of good illustrations. It would be valuable as a textbook for student nurses and as a reference for public health nurses. The emphasis is on hospital nursing although problems in home nursing and public health are given some attention.

This edition has 13 new chapters including several on diseases rarely found in the United States but now important because of movements of population due to war conditions. New and revised sentences and paragraphs have been written to include latest findings from medical and laboratory research. The entire chapter on nursing care in poliomyelitis has been rewritten, embodying new theories for care of that disease and including a brief description of the Kenny method. The new chapters on sulfanilamide and penicillin and the chapters on syphilis and gonorrhea already need some revising due to the newer treatment methods recently evolved for those diseases.

The whole book shows thoughtful planning and attention to advances in medical science and nursing arts.

ETHEL L. GOLDRICK, R.N.
Pasadena, Calif.

RECENT PUBLICATIONS AND CURRENT PERIODICALS

INDUSTRIAL

PSYCHOLOGICAL EFFECTS OF THE MENSTRUAL CYCLE ON WOMEN WORKERS. By Georgene H. Seward. *Psychological Bulletin*, Northwestern University, Evanston, Illinois, February 1944, p. 90.

PROTECTING THE HEALTH OF THE INDUSTRIAL WORKER: NUTRITION. By Robert S. Goodhart, M.D. *The Milbank Memorial Fund Quarterly*, 40 Wall Street, New York 5, New York, January 1945, p. 78.

MANUAL ON CONSERVATION AND UTILIZATION OF

EYESIGHT IN INDUSTRY. Form Pub. No. 402. 8 pp. Free.

INDUSTRIAL EYESIGHT APPRAISAL FORM. Form WPB-3671. 2 pp. Free. War Production Board, Office of Production Research and Development, Washington 25, D.C.

This manual and appraisal form are part of a Program to Increase Production by Conservation and Utilization of Eyesight in Industry being conducted by WPB, the United States Public Health Service, the War Manpower Commission, the United States Department of Labor, Division of Labor Standards, and co-operating agencies.

NOTES FROM THE NATIONAL ORGANIZATION FOR PUBLIC HEALTH NURSING

ASSOCIATE DIRECTOR RESIGNS

Public health nurses everywhere will share with the NOPHN the deep regret it feels in announcing the resignation of the associate director, Hortense Hilbert. Miss Hilbert leaves about March 15 to become director of the New York City Health Department Bureau of Nursing, largest public health nursing agency in the United States. Regrets must be mingled with satisfaction that this long vacant and important position will be so adequately filled. During her three years with the national staff Miss Hilbert has served as director of studies, secretary of the Committee on Nursing Administration, Council on Maternity and Child Health, with other important assignments. She has written numerous reports and articles for publication in *PUBLIC HEALTH NURSING* and other professional journals. She has traveled widely as NOPHN consultant on administrative and other public health nursing problems, over a period of time visiting agencies in almost every state. Miss Hilbert has a fine background of training and experience and the kind of intellectual approach to problem-solving, innate honesty, humor, and fundamental kindness toward people which are rarely found in one individual. Everyone at 1790 Broadway will miss her, as will her friends in nursing throughout the country. Our good wishes go with her and the hope that she will continue her interest in the affairs of the national office and public health nursing generally.

Ruth Fisher and Mary C. Connor of the NOPHN staff now become associate directors, Miss Fisher for administration, Miss Connor for education.

- Have you read the article, "The Visiting Nurse," in January *Hygeia*, prepared by Mrs. William Bell Cook of Seattle, Washington, a member of the National Public Health Nursing Day Committee? Believing that public health nursing organizations throughout the country may wish to use and distribute this article, the NOPHN has ordered 5,000 reprints. These are available from the NOPHN at 5 cents each (including postage) with a 25 percent discount for orders of 100 or more.

GENERAL MEMBERSHIP COMMITTEE

In order to carry on the promotion of NOPHN general membership more intensively, a National General Membership Committee has been formed with Margaret Culkin Banning, Duluth, Minnesota, as chairman. Mrs. Banning is also a member of the NOPHN Advisory Council. Mrs. David K. Ford of Cleveland, Ohio, Mrs. Langdon T. Thaxter of Portland, Maine, and Mrs. S. Emlen Stokes of Moorestown, New Jersey, ex-officio (chairman, Board and Committee Members Section of the NOPHN) are the other members of the Committee, together with the State General Membership Representatives.

These representatives are: Mrs. Sumner Spaulding, Beverly Hills, California; Mrs. Robert G. Bosworth, Denver, Colorado; Mrs. Louis L. Couder, Hartford, Connecticut; Mrs. John Rutland, Atlanta, Georgia; Mrs. R. S. Stringfellow, Boise, Idaho; Elizabeth Trei, Sibley, Iowa; Isabel Noble, Wichita, Kansas; Mrs. Cecil Brown, Baton Rouge, Louisiana; Mrs. Parker Poole, Portland, Maine; Mrs. Sheridan R. Cate, Pittsfield, Massachusetts; Mrs. James K. Watkins, Grosse Pointe Farms, Michigan; Mrs. John Schermer, Grand Rapids, Michigan; Mrs. Wilkes P. Covey, Minneapolis, Minnesota; Mrs. John A. Haskell, St. Louis, Missouri; Nora Harber, Fort Benton, Montana; Mrs. Herman F. Johnson, Omaha, Nebraska; Mrs. Sam Waugh, Lincoln, Nebraska; Mrs. John Satterfield, Buffalo, New York; Mrs. R. Livingston Ireland, Cleveland, Ohio; Mrs. Saidie Orr Dunbar, Portland, Oregon; E. Jeannette Morse, Sugarloaf, Pennsylvania; Mrs. Harold L. Lang, Pittsburgh, Pennsylvania; Mrs. William A. Heitshu, Lancaster, Pennsylvania; Mrs. William L. Marchant, Cranston, Rhode Island; Mrs. Eunice H. Leonard, Columbia, South Carolina; Mrs. Arch Trawick, Nashville, Tennessee; Mrs. Dietrich Schmitz, Seattle, Washington; and Mrs. Donald C. Shepard, Neenah, Wisconsin.

NEW STAFF LISTINGS

This month for the first time the Magazine is listing the headquarters staff under the special field of interest of each one. (Page A2.) All staff members, of course, carry many separate assignments other than those mentioned.

● New NOPHN publications lists are ready. Reprints per single copy have been reduced from a range of 10 to 35 cents to a range of 5 to 20 cents. Quantity orders will now be on a cost price basis, with a 25 percent discount on all orders of 100 copies or more.

NOPHN FIELD SCHEDULE

| <i>Staff Member</i> | <i>Place and Date</i> |
|--|--|
| Hortense Hilbert | Philadelphia, Pa.—March 7 Scarsdale, N.Y.—March 14 |
| Mary C. Connor | Washington, D.C.—March 12-15 |
| Katherine Ott | Albany, N. Y.—March 14 Wilkesbarre, Pa.—March 21-22 |
| Jessie L. Stevenson | Chicago, Ill.—March 1-3 |
| Tuberculosis Institutes will be held in California from March 1 to March 29 as follows: | |
| Oakland and Santa Rosa | —March 1-5 |
| Yuba City | —March 5 |
| Sacramento | —March 7 |
| Vallejo | —March 8 |
| San Jose | —March 13 |
| Fresno | —March 15 |
| Los Angeles | —March 17 |
| Riverside | —March 21 |
| San Diego | —March 23 |
| Santa Barbara | —March 26 |
| Salinas | —March 28 |
| Jean South, tuberculosis nursing consultant, loaned to NOPHN by the Community Service Society of New York, will lead the institutes. | |

| | |
|---|--|
| AWCS field trips scheduled for March are: | |
| Ruth Fisher | California: San Francisco — February 22-March 1 |
| | Los Angeles—March 1-6 |
| | San Diego—March 6-8 |
| Mable Grover | Akron, Ohio—March 27-30 |
| | Spartanburg, S.C.—March 12-26 |
| Dorothy Rusby | Anniston, Ala.—March 12-15 |
| | Pensacola, Fla.—February 20-March 11 |
| | Atlanta, Ga.—March 16 |

In addition to February field visits scheduled in the magazine, Hortense Hilbert attended one day of the House Military Affairs Committee Hearings on the May Bill; Ruth Houlton went to meetings in Washington of the National Nursing Council for War Service and of the Red Cross, respectively; and Jessie L. Stevenson gave consultation service to the Visiting Nurse Association of Detroit.

NOPHN INCOME AND EXPENSE, 1944

Income

| | |
|---|---------------------|
| Membership dues, individual | \$ 33,319.00 |
| Membership dues, agency | 34,089.32 |
| Contributions | 23,128.50 |
| *PUBLIC HEALTH NURSING magazine | 37,808.13 |
| Reimbursements | 4,285.63 |
| Biennial Convention | 2,532.07 |
| National Foundation for Infantile Paralysis | 35,722.84 |
| American War-Community Services | 14,271.11 |
| Miscellaneous | 7,397.43 |
| Total income | \$192,554.03 |

Expense

| | |
|--|---------------------|
| Administrative Practices | \$ 18,295.80 |
| Industrial Nursing | 14,917.48 |
| National Relationships | 5,349.94 |
| Professional Education and Vocational Guidance | 19,264.57 |
| Publications and Bulletins | 14,841.90 |
| School Nursing | 7,974.37 |
| Statistical Studies and Compilations | 20,853.79 |
| Tuberculosis Nursing | 3,593.99 |
| *PUBLIC HEALTH NURSING magazine | 37,221.79 |
| Biennial Convention | 2,216.90 |
| National Foundation for Infantile Paralysis | 35,722.84 |
| American War-Community Services | 14,271.11 |
| Total expense | \$194,524.63 |

Summary

| | |
|---------|--------------|
| Income | \$192,554.03 |
| Expense | 194,524.63 |

Expense over income \$ 1,970.60

*PUBLIC HEALTH NURSING Magazine

| | |
|---------------|-------------|
| <i>Income</i> | |
| Subscriptions | \$26,733.03 |
| Advertising | 11,075.10 |

Total income \$ 37,808.13

Expense (allocated)

| | |
|------------------------------------|-------------|
| General administration | \$22,318.12 |
| Travel | 80.40 |
| Printing and miscellaneous expense | 13,440.47 |
| Subscription promotion | 1,256.80 |
| Advertising promotion | 126.00 |

Total expense \$37,221.79

Summary for magazine

| | |
|---------|-------------|
| Income | \$37,808.13 |
| Expense | 37,221.79 |

Income over expense \$ 586.34

JOINT RESEARCH PROJECT

Appointment of Mrs. Rose M. Schweitzer to carry on joint research work for the National Organization for Public Health Nursing and the American Nurses' Association is announced by the two organizations. Research undertaken will concern itself with subject matter in the health and welfare field, and nursing in health insurance plans has been designated as a possible first project.

Mrs. Schweitzer has a bachelor's degree from Barnard and Teachers College, an M.A. from Columbia, and 10 years' research experience in the fields of science and medical literature. She has also had several years' experience in research administration and spent a year in Washington as industrial consultant with the New York State War Council. She has just terminated a year's appointment with the National Society for the Prevention of Blindness as assistant to the director of the Industrial Division.

● "Learning through Experience in Family Health Work: a Report of Student Participation in the East Harlem Nursing and Health Service Program, 1928-1941" is being distributed by the National Organization for Public Health Nursing. This report describes a field teaching program for public health nurses and other students in allied family service fields as part of an 18-year demonstration of health education and nursing care of the sick services in the East Harlem district of New York City.

Chapters are included on the origin and background of the student service, its administration, supervision, supervisory evaluation and report writing, and the adaptation of the field teaching program to the needs of undergraduate students. The implications for the future in public health nursing, as evidenced by this program, are outlined in the report.

Copies of the 103-page booklet, publication of which was provided for by a grant from the Milbank Memorial Fund, are 10 cents each. Write Publications Department, NOPHN, 1790 Broadway, New York 19, N.Y., for your copy.

● For the first time in history the U. S. Navy placed in commission a vessel—the U. S. S. *Higbee*—named in honor of a navy nurse, Mrs. Lenah Sutcliffe Higbee. Mrs. Higbee, second superintendent of the U. S. Navy Nurse Corps, 1911-1922, was one of four women to receive the Navy Cross and the only woman to receive it during her lifetime. The citation for her World War I service reads, "For distinguished service in the line of her profession, and unusual and conspicuous devotion to duty as superintendent of the Navy Nurse Corps." At the christening ceremony on February 1, 1945 in the Boston Navy Yard, Stella Goostray, chairman, National Nursing Council for War Service and director, Children's Hospital School of Nursing, Boston, presented the ship with a battle flag "in memory of Mrs. Higbee and of the 9,000 nurses who now serve in the Navy Nurse Corps."

Keep Your Red Cross at His Side

MARCH HAS been designated by the President as Red Cross month—the period in which the 1945 Red Cross War Fund will be raised. This annual drive points up the organization's essential and humanitarian services at home—disaster relief, home nursing instruction, nurse's aide training, the many volunteer services—as well as the vital war services to servicemen and the distressed populations of war-ravaged countries. The wartime responsibilities of the Red Cross, of course, will continue long after

the guns have ceased to roar in the services to the veterans and their families. This obligation will extend to assisting soldiers to adjust to new conditions in civilian life and preparing them to take their rightful places in field and factory. The welfare of the families of men in uniform must be guarded to see they do not suffer want either now or in the postwar period.

Red Cross activities are financed solely from voluntary contributions and gifts. We must all do our part.

ATTENTION!

Please notify us of changes of address as early as possible. Six weeks' notice is necessary to affect the magazine mailing list.

NEWS AND VIEWS

Highlights on Wartime Nursing

AAIN MEMBERSHIP DRIVE

Membership drive of the American Association of Industrial Nurses, Inc., underway since October 1944, has resulted in 500 new members to date, with applications in large numbers steadily coming in, reports its executive secretary, Gladys L. Dundore. Widespread interest in the Association, a national organization of the industrial nursing group, is evidenced also in the formation of many new local groups with an expression of 100 percent affiliation with the AAIN, according to Miss Dundore. Nursing groups as well as industrial physicians, safety engineers, personnel directors, superintendents and business executives have sought the national's help and guidance.

The Association's stated purpose is as follows:

"To stimulate interest in the special problems of the industrial nurse and to provide her with a means of obtaining experienced counsel; to raise qualifications and improve standards of work; to develop opportunities in the field of education; to aid in the promotion of industrial nurse participation in all nursing activities—local, state and national."

For further information about the Association and membership requirements, write Miss Dundore, 54 West 10th Street, New York 11, N. Y.

Industrial Nursing, official organ of the AAIN, has recently been enlarged from a quarterly to a monthly publication.

COLLEGE COUNSELORS REPORT

New emphasis in nursing is being given by college educators throughout the country in their vocational guidance programs, with many institutions broadening their curricula in order to provide adequate preparation for increasing numbers of women students who wish to prepare for professional nurse training.

Response on the part of the educators to current and anticipated postwar nursing needs has been reported by members of the college coun-

selling staff sponsored by the NNCWS and USPHS who have recently visited 385 universities, colleges and junior colleges in 47 states and the District of Columbia. Instructors in psychology, sociology and education, whose students show marked interest in psychiatric nursing, public health nursing and nurse education, were among the most earnest participants in faculty discussion groups, according to the counselors' report. Their reports show further that several universities have recently established schools or departments of nursing and a large number are considering affiliation with nearby schools of nursing in order to establish four or five-year programs leading to a diploma in nursing and an academic degree. A tendency on the part of many of the 94 junior colleges visited to introduce pre-nursing courses into their curricula or to revise existing pre-nursing programs in order to meet up-to-date standards for pre-professional training was also noted.

More About the Proposed Draft

(Continued from page 118)

February 23—NOPHN sent information to member agencies to the effect that certain provisions in bill HR 2277 as it stands will hinder rather than help the objective of providing adequate nursing service to the Armed Forces: (1) acceptance of non-registered nurses and graduates of very small hospital schools (2) induction of all cadet nurse graduates before induction of others, as it would reduce voluntary applications of graduates for military service and of students for enrollment in the Cadet Corps.

February 23—Statement by Katharine J. Densford, ANA president, before the House Military Affairs Committee on February 9 was reaffirmed as the official ANA policy. Certain amendments to HR 2277 prepared by ANA were sent to SNA's, not intended to indicate that the ANA approves or supports the bill but designed wholly to remove certain objections to the bill. These amendments, in the main, provide for (1) a national service act with a draft of nurses only a first step (2) induction of only graduate, registered, professional nurses or

NEWS NOTES

nurses who are graduates of state-accredited schools and eligible for state registration (3) determination of state quotas (4) deletion of preferential induction of cadet graduates (5) commissioning of nurse inductees (6) no discrimination for race, creed, sex or color (7) immediate voluntary recruitment campaign to be instituted by the President. The ANA also asks that a separate bill be passed providing for a Veterans' Administration Nurse Corps.

February 26—NNCWS and National Association of Colored Graduate Nurses urged acceptance of more Negro nurses by the Army and Navy.

March 7—House passes amendment to Selective Training Service Act providing that every female from 20 through 44 who is a graduate registered professional nurse, or who is a graduate of a state-accredited school of nursing and eligible for state registration, is subject to registration and selection for and induction into the Armed Forces. Procedures under the Act shall be the same as for men with same exemp-

tions, rights and penalties. Commissions are to be offered, and there shall be no discrimination for race, creed, or color. Consideration is to be given by local draft boards to P and A classifications of essentiality. Veterans' Administration nurses are not inductible. No registrant is disqualified because of being graduated from a hospital not having specified minimum of beds or patients. The President is to set up suitable quotas. Other than for registration this amendment shall not apply to women with dependent children or children under 18, or to women whose marriage occurred prior to March 15, 1945, but shall not affect voluntary recruitment of any qualified women not deferred after classification. Male nurses are included under the terms of the act but if now in the armed services may be inducted into Army Nurse Corps without registration with any local Selective Service board.

The House eliminated provision placing cadet nurse graduates at top of draft list. The bill now goes to Senate Military Committee.

From Far and Near

● The appointment of Mrs. Estelle Massey Riddle to the faculty of the department of nursing education at New York University, one of the largest in the United States, has just been announced. At present a consultant on the staff of the National Nursing Council for War Service, Mrs. Riddle begins her new duties with the Spring semester.

● Fellowships effective in the Fall of 1945 for a year's graduate study in health education leading to a master's degree in public health are being offered to qualified men and women between the ages of 22 and 40 by the U. S. Public Health Service through funds made available by the National Foundation for Infantile Paralysis. The stipend is \$100 per month during training, plus tuition at either North Carolina, Yale or Michigan University, and travel expense for field experience. The sponsors of the fellowships are concerned chiefly with meeting the existing shortage of trained health educators and preparing to meet future demands both in this country and abroad for qualified personnel having a thorough understanding of both public health and education. The success of the recruiting campaign for the Army and Navy at the time awards are to be decided will determine whether or not nurses can be given fellowships. The USPHS will be guided by the decisions of Procurement and Assignment on this problem.

● A recent appeal has been issued by the Director of War Mobilization and Reconversion (1) for the cancellation of all conventions, trade shows and other group meetings requiring the attendance of more than 50 persons unless determined to be essential to the prosecution of the war (2) for the reduction of all such meetings involving the attendance of 50 persons or less (3) and for the elimination of all other forms of non-essential travel.

In compliance with this federal request, the following national organizations have already announced cancellation of their 1945 annual meetings: American Public Health Association, National League of Nursing Education, and the National Conference of Social Work.

● "A Healthy Family in a Healthy Home" is the objective of the 1945 National Negro Health Week scheduled for April 1 to 8. Publications, a limited quantity of which will be supplied to local Health Week committees, include: an illustrated 16-page bulletin, a 9 x 12 illustrated poster, and a school leaflet. Additional free copies, if available, will be supplied on request with statement of need and use for them. Send request to: National Negro Health Week Committee, U. S. Public Health Service, Washington 14, D.C. For sales copies, inasmuch as free copies are not expected to meet the demand, write the Superintendent of Documents, Government Printing Office, Washington 25, D.C.

PUBLIC HEALTH NURSING

Standardizing Artificial Limbs—Representatives of the Army, Navy and the Veterans Administration are meeting in Chicago with manufacturers of artificial limbs to reach an agreement on standardized limbs to be issued to disabled service men by the three agencies, the Veterans Administration reported in February.

The Veterans Administration said there is little difference in the specifications for limbs in the three departments now, but standardization will simplify the making of repairs and replacements when these are required. It will also assure the disabled of receiving identical limbs and parts wherever they may be.

At the present time, each of the three supplying agencies draws up its own specifications and purchases limbs on the basis of bids submitted in accordance with these. While differences in price, materials and workmanship are slight, they are sufficient to keep the parts from being interchangeable, which occasionally causes delay in making repairs, the Veterans Administration said.

The Veterans Administration said its contracts allow the following payment for legs: \$290 for a full-length metal leg for an amputation where the hip is disarticulated; \$165 for the usual below-knee amputation; \$215 for the usual thigh amputation.

A veteran is permitted to talk with representatives of various manufacturers and make his own selection within the limits imposed by the character of his amputation.

Family Allotments in Canada—Hailed as "the greatest single social security measure ever placed before a Democratic Parliament," a Family Allotment Plan will be put in effect next July whereby every family in Canada, rich and poor alike, will receive a monthly government allotment for all children under 16 years of age.

For the first four children in a family, the following payment will be made: from birth until five years, \$5 a month; from six to nine, \$6 a month; ten to twelve years, \$7 a month; thirteen to sixteen years, \$8 a month. The rates decline by \$1 a month for the fifth child, by \$2 for the sixth and seventh, and \$3 for additional children. Simultaneously, income tax deductions for dependent children will be reduced. If the allowance is not applied toward the maintenance, care, training, education and advancement of the child, it will be discontinued or paid to some suitable person or agency. In enacting the law, the majority group felt that reasonable leeway must be allowed for parents' decisions in the expenditure of the budget for their children—that the virtue of the allowance in cash is that it becomes a part of the normal

family income which is left to the parents to disburse.

1945 Child Labor Legislative Program—Public health nurses are urged by the National Child Labor Committee to take an active part in the logical follow-up of the "Go-to-School" drive instigated last fall.

An effort is being made to secure 16-year child labor laws in states which have not yet enacted this standard. The proposed legislation includes a 16-year age minimum for all gainful employment during school hours and for employment in manufacturing establishments at any time—these provisions to become effective at the end of the war. Only 13 states, says the Committee—Conn., La., Mass., N. J., N. Y., No. Car., Ohio, Penna., R. I., So. Car., Utah, W. Va., and Wis.—approximate this standard. Montana and Florida prohibit work in manufacturing under 16 years. It is believed that a nationwide movement to secure such legislation now, but postpone its effective date until after the war, would capitalize upon the current interest in child employment. It would completely meet the argument that we must not reduce available manpower during the war, and would gain strength from the present interest in and fear of postwar unemployment. States unwilling to adopt the 16-year standard during the war might readily yield to its consideration if advanced as part of a postwar program to reduce unemployment.

As a first step in facilitating the program, public health nurses should familiarize themselves with conditions and laws affecting the employment of children in their states. Many of them have valuable first-hand knowledge of the effects of full-time employment on the health of 14- and 15-year-old children and of the greatly increased number of accidents to children of this age, resulting both from the increased numbers employed and from increased use of them in dangerous occupations, often in violation of the law. Industrial nurses, in particular, though they do not usually come in contact with children under 16 since the federal law establishes a 16-year limit in interstate commerce industries, are well informed about the relation between youth, inexperience, fatigue and industrial accidents.

Testimony of this kind is needed in the promotion of the 16-year age limit for employment. Many committees and board members of public health agencies, as well as professional staff members, can give effective help by co-operating with other agencies and individuals actively engaged in promoting this standard.

The National Child Labor Committee has

NEWS NOTES

recently published a pamphlet, "The Case for Sixteen Year Employment Laws," for campaign and educational use. Copies may be secured free of charge from the Committee at 419 Fourth Avenue, New York 16, N.Y., together with additional information desired.

Finding Displaced People—Persons desiring to make contact with relatives originally in Europe with whom they have been out of touch since 1933 due to the war, may write to the American Federation of International Institutes, 2 West 45th Street, New York 19, N.Y. A group of agencies have together set up and financed a Central Location Index by means of which information can be gathered, indexed and made available about any person for whom some one in the United States is inquiring. Through the American Red Cross, the International Red Cross, and all channels of overseas welfare agencies, both private and official, lists are being compiled of "displaced people."

Punishment for Venereal Disease Ended—A new law enacted by Congress abolishes all pay forfeiture of persons in the armed forces for the acquisition of venereal disease, which is now "in line of duty" instead of "due to willful misconduct," provided (1) the infected person complies with regulations requiring him to report and receive treatment and (2) that at time of infection he was not avoiding duty nor confined under sentence. With the exceptions noted, the law provides that the veterans who have acquired venereal disease in line of duty are eligible for pension and compensation benefits if disability results. The law is not retroactive.

Trends in Leprosy in the U. S.—A few conclusions drawn from a report on leprosy in the United States, based on 723 patients admitted to the National Leprosarium in Louisiana from July 1928 to January 1944, (Hopkins and Faget, *Journal of the American Medical Association*, December 9, 1944) are of interest to public health nurses. Of 303 foreign born more than 72 percent are of Mexican, Philippine, British West Indies or Chinese nativity. Many of these probably had contracted the disease before their arrival in the United States and may have established foci which could account for the occurrence of some of the cases in native born citizens.

According to the present report, there are 147 patients with a family history of leprosy,

suggesting that leprosy is largely a family disease, occurring in closely related persons to the extent that shows either there is an inheritable familial predisposition or that intimate contacts in family life account for familial incidence. The small number of cases in which there may have been marital transmission (only two couples) seems to indicate that contact is not the sole requisite for the transmission of leprosy. Nor is there evidence that any occupation is a predisposing cause since the patients are listed under 130 different occupations, ranging between high and low rank in the social scale.

The proportion, including all races, of males to females is more than two to one; but this does not hold true in the Negro race where there are approximately an equal number of men and women patients. Incidence in Louisiana of the disease in the white race as estimated from admissions is twice that in the Negro race.

Hopkins and Faget believe, from the experience of the Spanish-American War, that it is safe to predict a small number of those who serve in the armed forces in foreign countries where leprosy is prevalent will contract the disease.

The average age on admittance is 35.5 years, with the greatest incidence in the twenties and thirties. Average age at the onset of leprosy is 30.4 years. The duration of the disease before admission is from a few weeks to over forty years and averages five years. Twenty percent of the 723 patients have been released conditionally as having the disease in arrested form and being no longer a menace to public health. Leprosy is directly responsible for only a small percentage of the deaths among patients of the Leprosarium, while nephritis and tuberculosis are the direct cause of almost half of the fatalities.

Preventing inflation—During the war, the Office of Price Administration's efforts are aimed solely at checking inflation. From V-E Day on until full peacetime production is achieved and supply and demand come into reasonable balance, the forces of inflation and deflation will exist in our economy side by side. Uncertainty about prices could lead to a wild speculation or to a drying up of purchasing power and that is why prices must be held stable during the months ahead. To check inflation and assure food enough for all in 1945, it was necessary in December to revise the food program, instituting tighter and greatly extended rationing.

(Continued on page A8)

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R E P R I N T S from PUBLIC HEALTH NURSING

Of the articles which appeared in the January issue of PUBLIC HEALTH NURSING, the following have been reprinted and are now available:

School Health Problems as Seen in a
Pediatric Clinic 10c
Census of Public Health Nursing Agencies 5c

A single copy of every reprint is available to every NOPHN member free of charge. Reprints should be ordered from the National Organization for Public Health Nursing, 1790 Broadway, New York 19, New York. On orders less than \$1.00 money should accompany the order. Our new Publications List will be sent you on request.

News Notes

(Continued from page 171)

The actions are necessary because civilian supplies of meat, sugar, butter and commercially canned fruits and vegetables are at the lowest point since the war began and meat supplies are declining.

Another important phase of strengthening the food price control program is the campaign to obtain 100 percent compliance with price control regulations in the 600,000 retail food stores of the nation. This program, "The Grocer-Consumer Anti-Inflation Campaign," enlists cooperation of merchants, customers, educational institutions, women's organizations, the press and radio to aid in holding food prices at or below official OPA ceilings in their local communities. Success of the program will depend upon voluntary efforts. Public health nurses also can help develop community-wide understanding of what sellers and buyers should do and their interest is very close since many of the families in their care would be among those hardest hit by increased living costs.

During the campaign, each grocer is requested to see that he has posted the number of the OPA-Group to which his store belongs; to make sure that selling prices on all price-controlled grocery items are at or below official ceiling prices; to display all dollars-and-cents ceiling price lists where customers can easily see them; to encourage customers to check selling prices with ceiling prices of the groceries they are buying; and to urge customers to tell him about selling prices which they believe are above ceiling prices. Consumers are being asked to do their part by checking selling prices with the ceilings shown on the OPA lists in the store on at least five grocery items when they buy them; by talking over price errors with their grocer or butcher; and reporting on both failure to post ceiling price lists and uncorrected overcharges to the Price Panel of their local War Price and Rationing Board.